JUDGING CIVIL LIBERTIES DURING CRISIS

by

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(Under the Direction of John Maltese)

ABSTRACT

During times of national crisis, governments tend to sacrifice civil liberties in favor of policies that promote safety and national security. But how do the courts respond to crisis? When rights-limiting policies come into conflict with civil liberties, the disputes are taken to the courts. Previous research on U.S. courts has found supporting evidence for what has been characterized as the crisis thesis — that is, that when a nation faces crisis, the courts are less supportive of civil liberties claimants and criminal defendants. The U.S. Government has often utilized rights-restrictive policies during periods of national crisis to restore order and ensure public safety, often with the support of large majorities.[1] But, the U.S. Supreme Court, as a court of last resort, has the option to exercise judicial review.[2] The Court is then forced to balance civil liberties against the competing government interest in preserving national security. In this present study, I extend research on crisis decision making in courts by looking at U.S. Supreme Court decision making during the 1994–2004 terms of the Court, finding that the Court responded to the 9/11 crisis by becoming more conservative in civil liberties and criminal appeals cases. But this effect was short-lived, impacting outcomes only in the 2001 and 2002 terms of the Court. I then ask whether the crisis thesis is generalizable beyond the American judicial context. To address this question, I developed a new data source of criminal appeals cases decided by the Supreme Court of India between 2000 and 2011. Results from this analysis confirm

[1]See Linfield (1990), Lobel (2002), and Stone (2003) for thorough historical accounts of the treatment of civil liberties during times of national crisis in the United States.

[2]Judicial review is the power of courts to judge the constitutionality of actions taken by coordinate branches of government. Judicial was first claimed by the U.S. Supreme Court in *Marbury v. Madison* 5 U.S. (1 Cranch) 137, 2, L.Ed. 60.

the crisis thesis as a generalizable theory for how courts respond to national crisis.

Index words: judicial decision making, terrorism, crisis decision making, crisis jurisprudence, September 11, 9/11, U.S. Supreme Court, Supreme Court of India

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Chapter 1

An Introduction to Crisis and the Courts

During times of national crisis, governments tend to sacrifice civil liberties in favor of policies that promote safety and national security. When rights restrictive policies conflict with rights and liberties, the courts are called on to resolve the disputes. But how do courts generally respond to national crisis? Does crisis affect judicial decision making leading to outcomes that differ from those we might expect if there were no crisis? Two dominant theories advance competing views of judicial decision making during times of national crisis. The first suggests that crisis leads to a conservative shift in outcomes. In other words, the courts, like the government, becomes more rights restrictive. The second theory suggests just the opposite, that the courts stand with civil liberties claimants against the erosion of rights and liberties.

Previous research on judicial decision making during crisis has focused almost exclusively on U.S. federal courts, generally finding support for the rights restrictive hypothesis. Empirical analyses have been conducted for the U.S. Supreme Court, U.S. Courts of Appeals, and in a more limited fashion, the U.S. District Courts. But these studies employ a wide range of statistical methodologies to estimate the effects of crisis. The results are a mixed bag of findings and do not fully settle the question of how the courts generally respond to crisis. The most comprehensive and methodologically sound study focused on the U.S. Supreme Court (Epstein, Ho, King & Segal 2005). But this study was conducted

in close proximity to the 9/11 crisis[1] and therefore, cannot address the years following September 11, 2001, adequately. The passage of time not only affords new data to directly test the effect of the 9/11 crisis, but methodologies for estimating causal these effects have also been refined.[2] The singular focus on American courts could lead one to believe that crisis decision making is a local phenomenon. But surely, if crisis impacts decision making bodies such as the executive, legislative, and judicial branches in the United States, other countries too experience some impact when crisis strikes.

To address the current limitations in the study of judicial decision making during crisis, I extend research in two ways. First, I update previous research on the U.S. Supreme Court through an empirical examination of civil liberties and criminal appeals cases for the natural court[3] sitting at the time of the 9/11 terrorist attacks. This natural court began with the arrival of Associate Justice Stephen Breyer on August 3, 1994, and ended with the death of Chief Justice William H. Rehnquist on September 28, 2005. If previous speculation proves correct, the Court should become more conservative in civil liberties cases after 9/11. In addition, I push the bounds of previous research by empirically analyzing the effect of crisis on individual justices' decision making. Previous research on crisis and courts focused primarily on case outcomes and while this research provides valuable insights, we know that court outcomes are the product of individual decision makers. "Judges, we know, are people," (Radin 1925, 359)[4] who are influenced by their own policy preferences (Segal & Spaeth 1993) and individual goals (Baum 1994). Given this insight, it is reasonable to believe that judges, like the rest of us, vary to some degree in their responses to crisis. Second, I generalize research on judicial decision making during crisis

[1] The 9/11 crisis refers to the terrorist attacks on the United States on September 11, 2001, and the period following up to and including the War on Terrorism, the invasion of Afghanistan, and the invasion and occupation of Iraq.

[2] I discuss the difficulty in estimating causal effects and summarize strategies for overcoming this problem in section 1.3.

[3] A natural court represents a span of time when there are no personnel changes on the Supreme Court.

[4] See also Baum (2003).

beyond the American judicial context to the Supreme Court of India. In the following sections I provide a brief overview of U.S. court responses to crisis and crisis research on foreign courts.

1.0.1 Crisis and U.S. Courts

American history contains numerous examples to verify this claim. From President Abraham Lincoln's suspension of habeas corpus[5] to the current expansion of enhanced domestic surveillance techniques designed to catch domestic terrorists,[6] the U.S. Government has often utilized rights-restrictive policies during periods of national crisis to restore order and ensure public safety, often with the support of large majorities.[7] However, policymakers are not entirely unconstrained. The U.S. Supreme Court, with its power of judicial review,[8] wields enormous power to protect civil liberties against governmental encroachment and the exigencies of war.

Does the U.S. Supreme Court generally act as a guardian of civil liberties when the security of the nation is in jeopardy? Previous empirical research tells us it does not (Epstein et al. 2005). In cross-sectional analyses (not decomposed over time), Epstein et al. found that crisis decreased support for litigants claiming an infringement of their civil liberties by 10%. However, after decomposing the effect of crisis over time the study

[5]President Lincoln authorized General Winfield Scott to suspend habeas corpus in a letter to the general dated April 27, 1867: "To The Commanding General, Army of the United States. You are engaged in suppressing an insurrection against the laws of the United States. If at any point on or in the vicinity of any military line which is now or which shall be used between the City of Philadelphia and the City of Washington you find resistance which renders it necessary to suspend the writ of habeas corpus for the public safety, you personally, or through the officer in command at the point where the resistance occurs, are authorized to suspend that writ. Washington, April 27, 1861," (Nicolay & Hay 1894).

[6]For one example of rights-limiting legislation post-September 11, 2001, see Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), P.L. 107-56, 115 Stat. 272 (2001).

[7]See Linfield (1990), Lobel (2002), and Stone (2003) for thorough historical accounts of the treatment of civil liberties during times of national crisis in the United States.

[8]Judicial review is the power of courts to judge the constitutionality of actions taken by coordinate branches of government. Judicial was first claimed by the U.S. Supreme Court in *Marbury v. Madison* 5 U.S. (1 Cranch) 137, 2, L.Ed. 60.

reports a contradictory finding for the 2001 term of the Court — the first term of the Court following the 9/11 terrorist attacks. Epstein et al. report an *increase* in the proportion of cases decided in favor of civil liberties claimants. Despite this contradictory finding, the authors conjectured that a long war on terrorism should produce a "sharp turn to the right in ordinary civil rights and liberties decision[s]," (Epstein et al. 2005, 95).

The United States engaged in a prolonged war on terrorism. The Global War on Terrorism[9] resulted in two major conflicts spanning more than a decade.[10] And yet we still know little regarding the impact of the 9/11 crisis[11] on Supreme Court decision making.

1.0.2 Crisis and Foreign Courts

No foreign high court exactly mirrors the United States Supreme Court and the 9/11 crisis is almost certainly unique among modern national crises. My goal in extending research on crisis decision making to high courts outside the United States is not therefore focused on making direct comparisons between the U.S. Supreme Court and another high court, or between 9/11 and any other national crisis. Instead, I seek to understand whether the crisis thesis, developed largely with the U.S. Supreme Court in mind, may be generalized beyond the American judicial system. Previous research on decision making during crisis in the U.S. Supreme Court suggests that crisis reduces the number of liberal outcomes in civil liberties cases and possibly increases support for the government when the government is a litigant. Currently, no empirical research has been conducted to determine whether these patterns are limited to the American judicial system; that is,

[9]President George Bush announced the Global War on Terrorism in a speech delivered to Congress on September 20, 2001 (Bush 2001).

[10]The invasion and subsequent war in Afghanistan began on October 7, 2001 and continues to the present day. The invasion of Iraq occurred on March 19, 2003 pursuant to the *Authorization for Use of Military Force Against Iraq* (Resolution of 2002, P.L. 107-243, 116 Stat. 1498). An end of combat operations in Iraq was announced by President Barack Obama on August 28, 2010 in his weekly address and on December 15, 2011, Defense Secretary Leon Panetta officially declared the war over.

[11]The 9/11 crisis begins on September 11, 2001, and continues to the time of this writing. I discuss various definitions of crisis in section 1.1.1.

whether theories of crisis decision making can be applied to high courts in other political systems. Put another way, is decision making by the U.S. Supreme Court peculiarly vulnerable to crisis, or does crisis affect decision making in other similarly situated high courts as well? Needless to say, selection of an appropriate high court for inclusion in this project was a major concern. I considered three important criteria when selecting foreign high courts for this project. First, I looked at the existing research on foreign high courts and crisis. Second, I considered the similarity between foreign high courts and the U.S. Supreme Court. And finally, I looked for courts situated in countries that experienced at least one major crisis within the past 10 years. Additionally, since my aim was to test the effects of crisis empirically, I needed either a ready-to-use, trustworthy data source, or access to appropriate court records needed to create a new data set.

C. Neal Tate and Stacia Haynie's work (Tate 1993, Tate & Haynie 1993, Tate 1994) on courts and crisis regimes and the judicialization of politics during crisis suggested the Supreme Courts of the Philippines and India might prove to be fruitful avenues for empirical study. This line of research suggested the Supreme Courts of the Philippines and India responded to domestic national crises largely by deferring to their respective crisis regimes. This research presented compelling evidence that the Supreme Courts in the Philippines and India responded to declared states of emergency in a manner consistent with the primary tenets of the crisis thesis. The Supreme Court of the Philippines and the Indian Supreme Court are also good candidates for the present study since both courts share a number of features with the U.S. Supreme Court such as a well-defined original and appellate jurisdiction, agenda control, considerable judicial independence proscribed by a written constitution, and the power of judicial review. The courts are also situated similarly to the United States Supreme Court, atop a hierarchical judicial system that includes courts of first instance and intermediate appellate courts. With the first two criterion met, I next considered how many and what types of crises occurred within the

Philippines and India over the past 10 years. From this perspective, India appeared to be the best choice. India experienced three international crises between 2000 and 2011.[12] By contrast, crises in the Philippines during this period were purely domestic in nature and were sustained throughout the time-period. For example, Muslim separatists such as the Moro Islamic Liberation Front (MILF), the New People's Army (NPA), and the Moro National Liberation Front (MNLF) clashed frequently with the Philippine government and these disturbances persisted in one form or another throughout the entire period I considered.

Once I decided to focus on the Supreme Court of India, I turned to the High Courts Judicial Database (HCJD) (Haynie, Sheehan, Songer & Tate 2007) to determine whether this data source could be used in my project. At the time of this writing the HCJD was the only large-scale dataset available for empirical analysis of foreign high courts. The HCJD contains coded information on the formal decisions reported by 11 Anglo-American, common law high courts. Each court included used English as their primary working language at the time the database was constructed. The years of coverage vary by country and are reported in Table 1.1. Unfortunately the HCJD has not been maintained or updated beyond the year 2000 and while historical data of this nature is valuable, this limitation provided strong incentive to consider a fresher alternative data source. In addition, a review of randomly selected cases reported out for the Supreme Court of India revealed inconsistencies in the application of coding rules. In some cases these inconsistencies were significant enough that case outcomes were impossible to ascertain. For these reasons, I chose to develop a new dataset for the Supreme Court of India. This proved to be a major undertaking, requiring custom written web-scraping programs which I developed specifically for this project. I provide more in-depth background on India, its crises and the Supreme Court of India, and present a detailed overview of the construction of this

[12]These crises will be discussed in more detail in Chapter 3.

new dataset in Chapter 3.

Table 1.1: Coverage of the High Courts Judicial Database

Country	Court	Time Period
Australia	High Court	1969-2003
Canada	Supreme Court	1969-2003
India	Supreme Court	1970-2000
Namibia	Supreme Court	1990-1998
Philippines	Supreme Court	1970-2003
South Africa	Supreme Court of Appeal	1970-2000
South Africa	Constitutional Court	1995-2000
Tanzania	Court of Appeal	1983-1998
United Kingdom	Judicial Committee, House of Lords	1970-2002
United States	Supreme Court	1953-2005
Zambia	Supreme Court	1973-1997
Zimbabwe	Supreme Court	1989-2000

1.0.3 Project Overview

In the following sections, I discuss the crisis thesis and Milligan thesis,[13] in more detail. I then formulate testable hypotheses explored in this project and present a discussion on the fundamental problem of causal inference. I then present several methods to facilitate estimation of the causal effect of crisis on judicial decision making. In Chapter 2, I discuss the current state of research on crisis decision making in U.S. courts and present empirical analyses of the United States Supreme Court decision making for the natural court sitting at the time of the 9/11 terrorist attacks. In Chapter 3, I generalize research on crisis and the courts to the Supreme Court of India. I begin with a discussion of the historical context for the crises. I then present an overview of the related scholarship on the Supreme Court, develop a set of testable hypotheses, and follow with an empirical analysis of judicial

[13]The Milligan thesis which is the primary alternative to the crisis thesis, derives its name from the post-Civil War case *Ex parte Milligan*[14]

decision making during crisis in India. Finally, I present an overview and discussion of the implications for findings in this project in Chapter 4.

1.1 Theories of Judicial Responses to Crisis

1.1.1 The Crisis Thesis

First and foremost, it is worth noting that the crisis thesis is far from being a well-settled, agreed upon theory of judicial behavior. Different formulations of the crisis thesis place more or less emphasis on how crisis affects judges, their decisions, outcomes of the courts in general, or outcomes in specific types of cases. That being said, the crisis thesis can succinctly be summarized by saying that during national crisis the preferences of judges move to the right. This may be manifest either in individual votes or case outcomes. For example, judges / courts may defer to the executive branch when the executive is a party to a case, they may adopt a more rights-restrictive approach in cases involving infringement of civil liberties, and may rule against criminal defendants more often than would have been expected during peaceful times. Previous studies of crisis decision making and the courts have couched their arguments more explicitly in the language of curtailing civil liberties or judicial deference to the government (Collins, Norton, Manning & Carp 2008, Epstein et al. 2005). And no study to my knowledge has discussed the effect of crisis specifically on criminal appeals cases. The most comprehensive empirical analysis of Supreme Court decision making during crisis conducted by Epstein et al. included criminal appeals cases in their analysis. I treat criminal appeals cases as a subset of civil liberties cases and thereby attempt to provide even more in-depth insight in how and when crisis may influence judicial decision making.

As its names suggests, the crisis thesis requires a crisis. Following a national crisis, the

public and government respond in predictable ways. Public support for the government swells, particularly for the executive, bolstering executive discretionary authority. The government adopts new policies designed to manage the crisis and enhance national security. Changes in foreign and domestic policies produce litigation opportunities, cases arise, and the courts adjudicate the disputes. And if the crisis thesis holds, outcomes are generally more conservative for cases decided during crisis compared to outcomes that would have been realized if no crisis were present. Few studies give full accounts of the processes that underlie the crisis thesis: What constitutes a crisis? How does crisis affect public attitudes and shape governmental policies? How does crisis influence judicial outcomes? I provide some clarity on these questions in the following sections.

What qualifies as a crisis?

The crisis thesis needs a crisis. That seems simple enough, but what exactly qualifies as a crisis? Much of the literature on the crisis thesis discusses crisis in terms of the impact of war on judicial decision making. But strictly defining crisis as formal declarations of war means that the United States has faced crisis only five times in the nation's history, and not once since the conclusion of World War II.[15] These "definitional distinctions [of crisis] represent normative choices rather than verifiable fact," (Epstein et al. 2005, 46). Associate Justice Robert H. Jackson (1951) cautioned vigilance not only during war but also during sustained periods of tension, "Because liberty cannot exist apart from the impartial rule of law, it is vulnerable to wartime stresses, for then the rule of law breaks

[15]The United States has formally declared war 11 times, however, two of these declarations were against enemies during World I and six were against enemies during World War II. The United States formally declared the following wars: The War of 1812 on June 18, 1812, The Mexican-American War on May 13, 1846, The Spanish-American War on April 25, 1898, War on Germany (WWI) on April 6, 1917, War on Austria-Hungary (WWI) on December 7, 1917, War on Japan (WWII) on December 8, 1941, War on Germany (WWII) on December 11, 1941, War on Italy (WWII) on December 11, 1941, War on Bulgaria (WWII) on June 5, 1942, War on Hungary (WWII) on June 5, 1942, War on Romania (WWII) on June 5, 1942 (Elsea & Grimmett 2011).

down. The same passions and anxieties may result from a long period of tension which may be almost as demoralizing as actual war." Do civil wars qualify as national crisis? *Ex parte Milligan*[16], which dealt with President Abraham Lincoln's suspension of habeas corpus during the American Civil War, is often cited by detractors of the crisis thesis[17] as proof that the Court acts to protect civil liberties in a time of crisis.[18] What about the massive protests in Tunisia and Egypt that eventually brought down those governments and instituted democracies?[19] Do these events qualify as national crises?

Epstein et al. (2005) advocated a broader definition of crisis which included wars, major crises identified by experts in international relations and conflict studies,[20] and rally effects.[21] I adopt a similar definition of crisis which includes declared wars, declared states of emergency, or domestic or international events that pose a threat to national security. Operationally, I rely on external data sources including the International Crisis Behavior Project (Wilkenfeld, Brecher, Hewitt, Beardsley & Eralp 2009), the Correlates of War (*Correlates of War Project* N.d.), and the World Integrated Crisis Early Warning System (WICEWS) (Levey 2012, O'Brien 2010) to determine onset and duration of crises, particularly in the case of India.

[16] 71 U.S. 2 1866.

[17] See Fletcher (2002), Scheppele (2003), and Stone (2003) for example.

[18] *Milligan* however does not represent an altogether fair test of the crisis thesis as it was decided well *after* the conclusion of the Civil War.

[19] Protests in Tunisia began mid-December 2010 and culminated in the resignation of President Zine El Abidine Ben Ali, who had been in power for 23 years, on January 14, 2011. Similar protests sprang up in Egypt in January 2011, toppling President Hosni Mubarak's regime.

[20] Subject matter experts includes political scientists and international relations experts who study crisis and conflict, area specialists, and government or other practitioners who specialize in related fields of inquiry.

[21] Epstein et al. defined rally effects as a ten point or greater surge in presidential approval ratings following a major international event.

Individuals respond to crisis

Following a national crisis, there is a public response, and more probably not just one response, but many responses since individuals react to crisis in different ways. Crises produce a range of human emotion: fear, grief, sadness, sense of loss, even anger at those who are perceived to be responsible for the crisis or its continuation. Bueno de Mesquita & McDermott (2004) argue that emotions play a central role in shaping preferences and preferences ultimately guide decision making.[22] How do our emotions following a crisis translate into preferences that shape public policy? The answer depends on what emotions surface as the dominant public mood and how the government interprets and respond to threat and public opinion.

Huddy, Feldman, Taber & Lahav (2005) found that a minority of Americans experienced a high degree of anxiety associated with the 9/11 terrorist attacks. Fear can be especially acute in high risk, low information environments (Slovic, Fischhoff & Lichtenstein 1980) such as a major catastrophe or physical attack. Since fear is often associated with risk averse behaviors, we might expect fearful individuals to prefer an isolationist approach to foreign policy. Anger, on the other hand is often linked to risk-seeking behaviors (Lerner & Keltner 2001). Accordingly, we might expect angry individuals to be supportive of a militarized response to an attack, and in fact this was the case following 9/11. Huddy et al. found that fearful individuals were less supportive of an aggressive military response and less supportive in general President George W. Bush's job performance. But the majority of Americans in this study felt threatened by the attacks, showed greater support for President Bush, and approved of more drastic changes to both domestic and foreign policy to combat the threat of future attacks. Davis & Silver (2004) demonstrated trust in government and political ideology interact with an individual's sense of threat to determine his commitment to civil liberties. Fearful

[22] See also Carlson & Dacey (2008) and Hertel, Neuhof, Theier & Kerr (2000).

people look to government to provide protection (Stone 2004) and as a sense of threat increases, individuals are more willing to trade off civil liberties in exchange for government policies that promise greater safety and security. Public demand for safety and security gives government officials an incentive to make policy changes and demonstrate their responsiveness.

As I mentioned earlier, regular criminal appeals cases are not generally discussed explicitly in the context of the crisis thesis even though empirical studies to date have included criminal appeals cases in their analyses of judicial decision making. I likewise include criminal appeals cases as a subset of civil liberties, believing that effects for different types of cases (regular civil liberties cases versus criminal appeals) may vary from one crisis to the next. One possible explanation for this variation could be that different crises manifest their own unique set of salient characteristics. So for example, we know that free speech has repeatedly come into conflict with government interests during previous national crises, but during the 9/11 crisis, privacy became a major concern among civil libertarians. Fear and anger may hold the keys to understanding public attitudes about crime, leading to decreased tolerance for criminal activity during crisis. Jackson (2006) found that fear of crime is linked to more general attitudes about social order and the moral trajectory of society in general. During a time of crisis, anxiety levels are heightened as people look for stability and assurances of public safety. In this climate, it is reasonable to assume that public attitudes toward crime become particularly salient and negative since crime also represents a threat to public safety (McIntyre 1967).

Finally, the well-documented rally-round-the-flag effect (Mueller 1970) is also commonly cited by crisis thesis advocates. According to this theory, the public rallies behind the president in a show of patriotism (Brody 1991) following a national crisis. The swell of patriotic feelings may result from a desire to present a unified front against a common enemy, in which case opposition to the president or her policy agenda may be viewed as

unpatriotic by the masses. The rally effect is evidenced by a marked increase in public approval of the president. With this new-found support, the government formulates a response to the crisis with broad support from the general public.

Governments respond to crisis

"Wars do not merely disrupt systems of governance. Wars remake governments. They thrust politicians into new debates about policy issues, they reshape the relationships between individuals and states, and they redefine the very purposes of government," (Howell 2009, 1782). When crisis threatens the safety and security of a nation, it is imperative that the government responds to restore order. How does crisis reshape government and what are the new purposes alluded to by Howell? Crisis governments reshape and redefine themselves around a singular purpose: survival. Governments adopt policies designed to restore order, increase public safety, and enhance national security. Often the newly adopted policies conflict with civil liberties (Linfield 1990).

Associate Justice William J. Brennan, Jr. commented on the United States' track-record with civil liberties during crisis stating, "There is considerably less to be proud about, and a good deal to be embarrassed about, when one reflects on the shabby treatment civil liberties have received in the United States during times of war and perceived threats to its national security," (Brennan 1987, 1). But why do civil liberties suffer when national security is threatened? Judge Posner (2006, 5) reasons, "the more numerous or dangerous the nation's enemies are believed to be, the greater the pressure to curtail civil liberties in favor of executive discretion and unity of command, in order to enable the government to wield its great power more effectively, if less responsibly." Executive discretion, unity of command, and the expediency of security measures sometimes conflict with individual liberties. For example, freedom of speech and freedom of the press are generally accepted as essential to a healthy democracy during peaceful times. But during crisis these rights

leave the government open to criticism which could threaten unity of command (Chafee 1941). Once conflicts between civil liberties and government policies occur, individuals take their grievances to the courts.

Courts respond to crisis

How do courts respond to national crises? There is no simple or straightforward answer. Epstein et al. (2005) provide one of the most comprehensive accounts of the crisis thesis, combining arguments from a wide variety of sources. Under what the authors refer to as the "accommodation view" of the Constitution, the Court may justify government curtailment of civil liberties by recognizing the emergency war powers of Congress and the president or simply by employing a different set of standards for judicial review. The Constitution after all confers war powers on the president and Congress, and makes no mention of the courts in relation to war.[23] Similarly, some scholars of the courts contend that the president is in a better position to respond to national emergencies than either Congress or the courts (Posner & Vermeule 2007, Vermeule 2006). Others contend that the courts lack appropriate expertise in matters of security policy. For example, John Yoo[24]

[23]Article I Section 8 grants the Congress the power to "provide for the common defense and general welfare of the United States; to define and punish piracies and felonies committed on the high seas, and offenses against the law of nations; to declare war, grant letters of marque and reprisal, and make rules concerning captures on land and water; to raise and support armies, but no appropriation of money to that use shall be for a longer term than two years; to provide and maintain a navy; to make rules for the government and regulation of the land and naval forces; to provide for calling forth the militia to execute the laws of the union, suppress insurrections and repel invasions; to provide for organizing, arming, and disciplining, the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the states respectively, the appointment of the officers, and the authority of training the militia according to the discipline prescribed by Congress; and to make all laws which shall be necessary and proper for carrying into execution the foregoing powers, and all other powers vested by this Constitution in the government of the United States, or in any department or officer thereof." Article II Section 1 of the Constitution vests the "executive power of the United States" in the president. Section 2 provides that the president "shall be commander in chief of the Army and Navy of the United States, and of the militia of the several states, when called into the actual service of the United States." And Section 3 states the president "shall take care that the laws be faithfully executed."

[24]John Yoo is a former Deputy Assistant Attorney General in the Office of Legal Counsel who served under President G.W. Bush between 2001 and 2003.

questioned the expertise of the courts asking, "Can the judiciary make good factual and legal judgments in the middle of war? I believe this assertion of power takes courts far beyond their normal areas of expertise and risks conflict with the President and Congress" (Yoo 2006, 130). Judge Posner echoes this concern,

> "Judges, knowing little about the needs of national security, are unlikely to oppose their own judgment to that of the executive branch, which is responsible for the defense of the nation. They are especially unlikely to interpose constitutional objections because of the difficulty of amending the Constitution to correct judicial error. Conservative judges are particularly unlikely to resist claims of national security-and the federal judiciary may be more conservative today than at any other time in the last half century. Fortunately, when national security measures are agreed on by Congress and the president, the need for judicial intervention diminishes. The legislative and executive branches are rivalrous even when nominally controlled by the same political party; the Republican Congress has not been a rubber stamp for the national security initiatives of the Bush administration. To an extent not acknowledged by civil libertarians, the Court can sit back and let the other branches duke it out, for when the competitive branches agree on a measure, the likelihood of its being an exaggerated response to a perceived danger is diminished" (2006, 9).

Judge Posner's basic argument is peppered with a mixture of separation-of-powers arguments and pragmatics. According to him, the president and Congress are constitutionally responsible for the security of the nation, not the courts and judges lack the knowledge and expertise (p. 35) either to direct the nation's war machine or to stymie the executive war effort. What's more, there is really no need for judicial intervention since Congress

can and often does provide an appropriate check on the executive during war time. Justice Stone also articulated this view in his *Hirabayashi*[25] opinion,

> "Since the Constitution commits to the Executive and to Congress the exercise of the war power in all the vicissitudes and conditions of warfare, it has necessarily given them wide scope for the exercise of judgment and discretion in determining the nature and extent of the threatened injury or danger and in the selection of the means for resisting it...Where, as they did here, the conditions call for the exercise of judgment and discretion and for the choice of means by those branches of the Government on which the Constitution has placed the responsibility of warmaking, it is not for any court to sit in review of the wisdom of their action or substitute its judgment for theirs."

Epstein et al. also suggest the courts may rally behind the president during national crisis (Grossman 1997, Rossiter 1951). Courts may behave this way for a number of reasons. Stone (2004) argues that wartime ignites nations, calling on every member of society to some level of action. The idea that the Supreme Court "goes to war" was the central thesis of Belknap's (1980) article discussing the efforts of the Supreme Court "to define its...role in a total war". According to Belknap, two important factors influenced the Court's decision in the Nazi Saboteur Cases[26]: a concern for external legitimacy and a belief that civil liberties should not limit the country's war effort. Collins et al. (2008) suggest the courts rally behind the president in order to present a united front against a foreign threat. In the wartime atmosphere, opposition to the president or dissent over changes to public policy designed to enhance security may be considered unpatriotic.

Courts may also be influenced by public opinion through the gradual replacement of judges for example (Dahl 1957). Research also shows that public opinion may have signif-

[25] Hirabayashi v. United States, 320 U.S. 81 (1943).
[26] *Ex parte Quirin*, 317 U.S. 1 (1942).

icant direct effects on judicial decision making (Fleming & Wood 1997, Link 1995, McGuire & Stimson 2004, Mishler & Sheehan 1993, Mishler & Sheehan 1996, Giles, Blackstone & Vining 2008). Public support for the president and policies that increase national security may directly impact judicial decision making as judges weigh concern for institutional legitimacy and public reaction to their decisions. Possessing neither the power of the purse nor the sword,[27] fear of non-compliance may be a real constraint on judicial decision making. But public opinion may affect judicial decision making more passively. Judges are after all only private citizens in black robes. It is therefore reasonable to assume that judges like the rest of the public experience their own emotional responses to national crises. Following a crisis, judges may come to form their own opinions that mirror those of the general public — fear or anxiety over safety and security concerns, willingness to trade off civil liberties for the promise of stability, and harsher attitudes toward criminal elements in society that represent a departure from expected societal norms.

Of course there is an alternative view of judicial decision making during crisis. Under the *Milligan thesis* (Epstein et al. 2005, 7), the courts may act to protect civil liberties against excessive security measures.

1.1.2 The Milligan Thesis

In contrast to the crisis thesis, the Milligan thesis holds that the Supreme Court serves as a guardian of civil liberties during times of war and national crisis. The Milligan thesis derives its name from the post-Civil War case *Ex parte Milligan*[28] which was a rebuke of President Lincoln's use of military tribunals while civilian courts were open and available. Lambdin P. Milligan was a Major General of Vallandigham's Sons of Liberty, a Confederate-sympathizing underground army. He had been arrested on October 5, 1864

[27] Alexander Hamilton, 1788. "The Federalist No. 78." *Independent Journal*, retrieved on April 1, 2011 from www.constitution.org/fed/federa78.htm.

[28] 71 U.S. 2 1866.

for "conspiracy against the government of the United States" (McGinty 2008, 248) and tried along with four others before a military commission. The defendants' habeas corpus pleas were denied and Milligan was ultimately convicted and sentenced to death. Supreme Court Justice David Davis, riding circuit, and circuit court justice David McDonald wrote to President Johnson, asking for a stay of execution so the case could be heard in federal court. "If these executions go forward now, and if hereafter the authority of the military tribunal, on whose sentence the execution is had, should be judicially denied, a stain on the national character would be consequence."[29] Davis and McDonald could not agree on the legal questions presented in Milligan's case so they issued a letter of division to the Supreme Court which agreed to take up the case.[30] The question before the Court was whether civil courts had jurisdiction over a military tribunal.

Justice Davis, writing for the Supreme Court, noted the difficulty in resolving this legal question while the fate of the nation still hung in the balance and concerns over the public safety trumped dispassionate judgment:

> During the late wicked Rebellion, the temper of the times did not allow that calmness in deliberation and discussion so necessary to a correct conclusion of a purely judicial question. Then, considerations of safety were mingled with the exercise of power, and feelings and interests prevailed which are happily terminated. Now that the public safety is assured, this question, as well as all others, can be discussed and decided without passion or the admixture of any element not required to form a legal judgment...[31]

Davis further surmises that once relative peace and safety had been restored:

[29] From David Davis and David McDonald, May 11, 1865, Court-Martial Records, in The Papers of Andrew Johnson: May-August 1865, page 60.

[30] The case of *Ex parte Milligan*, 71 U.S. 2 (1866) was decided six days short of the anniversary of Lee's surrender at Appomattox.

[31] *Ex parte Milligan*, 71 U.S. 109 (1866)

> It can serve no useful purpose to inquire what those laws and usages [of war] are, whence they originated, where found, and on whom they operate; they can never be applied to citizens in states which have upheld the authority of the government, and where the courts are open and their process unobstructed. This court has judicial knowledge that, in Indiana, the Federal authority was always unopposed, and its courts always open to hear criminal accusations and redress grievances, and no usage of war could sanction a military trial there for any offence whatever of a citizen in civil life in nowise connected with the military service... Why was he not delivered to the Circuit Court of Indiana to be proceeded against according to law? No reason of necessity could be urged against it, because Congress had declared penalties against the offences charged, provided for their punishment, and directed that court to hear and determine them. And soon after this military tribunal was ended, the Circuit Court met, peacefully transacted its business, and adjourned. It needed no bayonets to protect it, and required no military aid to execute its judgments.[32]

According to Davis' opinion, Milligan should have been delivered to the civil court since "Martial rule can never exist where the courts are open and in the proper and unobstructed exercise of their jurisdiction" [127].

Chief Justice Samuel P. Chase was not so sweeping in his concurring opinion. Chase concluded that when habeas corpus is lawfully suspended, the president may arrest and detain suspects and that trial by military commission may be authorized by Congress even though the civil courts are operating. After all, "when the nation is involved in war, and some portions of the country are invaded... it is within the power of Congress to determine in what states or district such great and imminent public danger exists as

[32] *Ex parte Milligan*, 71 U.S. 121 (1866)

justifies the authorization of military tribunals."[33] Justice Chase ultimately agreed with the outcome in Milligan. Congress possessed the power to institute military commissions, but chose not to do so.

According to the *Milligan thesis* the institutional design of the Supreme Court insulates the justices from majoritarian politics of the elected branches, freeing the Court to protect civil liberties when they are threatened. Supreme Court justices are appointed, not elected, and enjoy life tenure on the Court with judicial salaries that cannot be diminished during their tenure. Advocates of the Milligan thesis note that during national crises, the elected branches often overestimate perceived threats to national security (Brennan 1987, Cole 2002, Stone 2003), clamp down on free speech (Chafee 1941, Stone 2004), and restrict numerous civil liberties (Cole & Lobel 2007) without making us much safer (Fisher 2008). Accordingly, the courts are needed even more in perilous times (Stone 2004) to guarantee our civil liberties under the rule of law (Pious 2006).

So where does the weight of evidence currently stand on these two theories? Does the Court valiantly guard civil liberties during crisis as the Milligan thesis suggests? Or is the crisis thesis a better model for predicting judicial decision making during crisis? These questions have far-reaching implications, not just for understanding judicial decision making, but also for understanding the precedential value of crisis decisions.

1.2 Translating Theory into Testable Hypotheses

Variants of the crisis thesis present several interesting questions about judicial decision making during crisis that translate into testable hypotheses. At its core, the crisis thesis predicts a conservative shift in civil liberties cases during crisis. I focus on three important questions related to this proposition: What type of cases are affected by crisis? How long

[33] *Ex parte Milligan*, 71 U.S. 140 (1866).

do the effects of crisis persist? And, does crisis affect all judges equally?

The cases coming before national high courts are diverse and crisis may not affect decision making in all types of cases equally. The literature suggests that civil liberties cases arise as a result of conflict between new rights-restrictive policies aimed at increasing national security during crisis. Additionally, public tolerance of criminal behavior wanes during a time of turmoil. Most research in this area has been concerned with establishing that crisis results in less support for civil liberties claimants, but virtually none of this research has explicitly sought to determine how long crisis effects last. Is the effect of crisis constant over time or is it more pronounced immediately following the onset of crisis, gradually diminishing over time? In addition to disaggregating the effects of crisis over time, I ask whether crisis affects all judges equally.

Most accounts of the crisis thesis focus on court outcomes, but I assert that court outcomes are the result of individual decision makers. The general account of the crisis thesis suggests that judicial preferences shift to the right (that is, in the conservative direction), but previous research suggests that individual responses to crisis vary with factors such as trust in government (Davis & Silver 2004) and emotional responses to crisis (Huddy et al. 2005). Perhaps ideological predisposition influences how individual judges respond to crisis. The following hypotheses form the basis of the empirical analyses presented in this project and each will be discussed in more detail in their respective chapters:

H1 Observed outcomes in U.S. Supreme Court civil liberties cases decided during crisis will be more conservative than would be expected if no crisis had occurred.

H2 Observed outcomes in U.S. Supreme Court criminal appeals cases decided during crisis will be more conservative than would be expected if no crisis had occurred.

H3 The effect of crisis on individual U.S. Supreme Court justices' voting in civil liberties cases, and criminal appeals cases will vary with the conservativeness of the individual justice. Crisis will increase conservative voting for moderate and liberal U.S. Supreme Court justices in civil liberties cases and criminal appeals cases, and the effect will be most pronounced for the liberal-most justice.

H4 Observed outcomes in Indian Supreme Court criminal appeals cases decided during crisis will be more conservative than would be expected if crisis did not happen.

At their core, the questions presented here represent simple cause-and-effect questions, but due to their very nature, questions of causality are far from simple. In the following section, I discuss causality and what has become know as the *fundamental problem of causality*, present the counterfactual model as an integrated approach to overcoming the fundamental problem, and provide an overview of the specific strategies employed in this research project for estimating causal effects.

1.3 Estimating the Causal Effects of Crisis

Social scientists use statistical models to simplify and understand real-world social phenomena. Models can be used to summarize the relationships between key variables of interests and associated outcomes and make predictive inferences.[34] As King & Zeng put it, social scientists use the "facts we know to learn about facts we do not know," (2007, 183). Many of the standard statistical tools in the social scientist's toolbox are designed to improve prediction of outcomes given some appropriate input data. Classical regression

[34]Predictive inferences can be made from the available data which theoretically represent one randomly drawn sample from a larger population of data (Neyman 1937).

techniques provide parameter estimates and estimates of uncertainty which can then be used to make predictions and predictive comparisons by iterating over the values on one or more model inputs. Parameter estimates can even be used to make predictions using new data, that is, values not seen by the model. Alternatively, many social science questions focus on establishing *causal* relationships or estimating causal effects. Causal questions often take a form such as: Does X cause Y? If X causes Y, how large is the effect of X on Y? And what would have happened to Y if X had never occurred? In this section, I discuss the concept of causality and define some key assumptions that facilitate the estimation of causal effects. I then introduce the potential outcomes framework and present two strategies used in this project to estimate the effects of crisis on judicial decision making.

1.3.1 Overview of Causality

Causality is a broad term encompassing at least three different concepts of causality (Cox & Wermuth 2004, Holland 1986) commonly called zero-level, first-level, and second-level causality. Zero-level causality is "a statistical association, i.e. non-independence, with clearly established ordering from cause to response and which cannot be removed by conditioning on allowable alternative features," (Cox & Wermuth 2004, 287). In zero-level causal analyses, the emphasis is generally placed on what qualifies as an 'allowable' feature. Allowable features must be pre-treatment variables unaffected by the treatment itself. For example, blood pressure measurements taken before and after treatment for a heart condition could not be used as an allowable feature in a study designed to estimate the effect of a new heart drug since the last measurement is likely affected by the treatment. Characteristics such as age, gender, and sex could be considered allowable features though.

First-level causality typically involves measuring the effect of a cause, typically called the treatment, compared to the potential effect that would have been obtained if the

treatment had not been applied. First-level causality questions are generally framed in terms of individuals, e.g., What is the effect of treatment for individual cases? But, since we can never truly observe both outcomes simultaneously, results are often reported at the population level. Second-level causality is concerned with uncovering the underlying generation processes of causal mechanisms — what caused the cause. For example, a designed experiment that uncovers a causal link between political attitudes and choice of college majors might lead to additional research on the transmission of political attitudes from parents to their children. My goal in this project is to estimate the effects of crisis (the treatment) on high court outcomes and the on votes of individual high court justices. I therefore adopt the first-level notion of causality and frame the analysis in terms of estimating causal effects. But estimating causal effects is a tricky business and there are several assumptions to consider before proceeding.

1.3.2 Common Assumptions Required for Causal Analysis

People make causal inferences every day, often without even realizing it. We rely on our previous experiences to form expectations about routine activities like turning on the lights in a dark room, taking an aspirin to cure a headache, and stepping on a scale to measure body weight. But in each of these mundane activities, we implicitly make assumptions about what will happen when we choose one course of action over another. In this section I introduce five key assumptions that facilitate the estimation of causal effects: temporal stability, causal transience, no interference between units, independence and conditional independence, and stable unit treatment value assumption (SUTVA). I use the example of taking an aspirin to cure a headache to facilitate this discussion of common assumptions.

Temporal Stability is the assumption that responses to treatment and control are constant over time. In other words, if taking an aspirin to cure past headaches proved successful,

it is reasonable to assume taking an aspirin will continue to have the same effect, all other factors being equal. *Causal transience* is the assumption that a previous state does not alter the effect of treatment. If I have a headache and I take an aspirin, the expected effect is that my headache will go away. But what if I take an aspirin when my head is not hurting? Taking an aspirin in this instance shouldn't result in a headache! According to the *no interference between units* assumption, applying a treatment to one individual should not result in a treatment effect in an individual who did not receive the treatment. My headache should not be affected by another individual taking an aspirin. The *Independence* assumption requires that treatment assignment is independent of the potential outcomes under treatment or control. Independence is often achievable in randomized studies where individuals are randomly selected into treatment and control groups. In these studies, knowing the treatment assignment give no information about the potential outcomes. When the independence assumption holds, the treatment assignment mechanism is said to be ignorable. The independence assumption can be written more formally,

$$(Y^1, Y^0) \perp\!\!\!\perp T, \tag{1.1}$$

where Y^1 and Y^0 are potential outcomes under treatment and control, respectively and the braces around Y^1, Y^0 indicate that treatment (T) is jointly independent ($\perp\!\!\!\perp$) of any function of the potential outcomes. The independence assumption is often implausible for observational studies, and so a weaker assumption, *conditional independence* if often used instead. Conditional independence suggests that treatment assignment is strongly ignorable (Rosenbaum & Rubin 1983) conditional on a set of observed characteristics X sometimes called confounding variables. Confounding variables are sources of variation in individuals that are causally prior to treatment, correlated with the treatment assignment, and which affect observed outcomes.

Rubin (1980) combines of these several assumptions into the more encompassing *stable unit treatment value assumption* or SUTVA. According to Rubin (1986, 961), "SUTVA is simply the a priori assumption that the value of Y for unit u when exposed to treatment t will be the same no matter what mechanism is used to assign treatment t to unit u and no matter what treatments the other units receive." SUTVA expects that a treatment applied to any individual will have the same effect and this effect is not altered by the way treatment is assigned or by the treatment assignment of other individuals.

In the next section, I introduce the counterfactual model and two methods which rely on case matching procedures to estimate the causal effects of crisis. These methods were chosen specifically because they facilitate estimating causal effect while maintaining the assumptions discussed in this section.

1.3.3 The Counterfactual Model

The counterfactual model has its roots in the early experimental work of Jerzy Neyman (1923, 1935) and Ronald A. Fisher (1935). Donald Rubin (1974, 1978, 1986, 1990) later formalized the counterfactual model for observational studies. The core assumption of the counterfactual model is that every individual in a given population of interest has a *potential* outcome under each state of treatment. In the simple design where there are only two states, the states are generally referred to as treatment and control.[35] I define a population level random variable T with individual realizations t_i to indicate membership in the treatment or control group for individual i such that

$$T = \begin{cases} 0 & \text{for individuals in the control group} \\ 1 & \text{for individuals in the treatment group.} \end{cases} \tag{1.2}$$

[35]Extending the counterfactual framework to allow more than two treatment states is an ongoing area of research. Since the two-state model fits my current needs however, I will limit this discussion to a two-state framework.

I also define a population level random response variable Y with individual realizations y_i where

$$\begin{aligned} Y &= Y^1 \text{ if } T = 1, \\ Y &= Y^0 \text{ if } T = 0. \end{aligned} \tag{1.3}$$

This definition is sometimes written equivalently

$$Y = TY^1 + (1 - T)Y^0, \tag{1.4}$$

which draws attention to the simple truth that while $T = 1$ only Y^1 is directly observable and conversely, while $T = 0$, only Y^0 is directly observable. Rubin viewed this as a problem of missing data. Accordingly, estimation of causal effects can be made by drawing inferences about the missing values from the observed values:

$$\begin{aligned} Y_{mis} &= (1 - T)Y^1 + TY^0, \\ Y_{obs} &= TY^1 + (T - 1)Y^0. \end{aligned} \tag{1.5}$$

Line 1 of equation 1.5 makes it clear that when $T = 1$, $Y_{mis} = Y^0$ and when $T = 0$, $Y_{mis} = Y^1$. In other words, when an outcome for an individual under treatment is observed, the potential outcome for that individual under control is missing, and must be estimated. Conversely, when an outcome for an individual under control is observed, the potential outcome for that individual under treatment is missing and must be estimated.

Under the *potential outcomes* framework, each individual is potentially exposable to either treatment or no treatment. Therefore each individual has two potential outcomes, y_i^1 if the individual was exposed to treatment or y_i^0 if the individual was exposed to control (Rubin 1974, Rubin 1978). Therefore, the individual-level effect of treatment can be calculated by the simple algebraic difference between the two potential outcomes for

individual i

$$\delta_i = y_i^1 - y_i^0. \tag{1.6}$$

This model is sometimes referred to as Rubin's[36] Causal Model (Holland 1986). Since one outcome will always be a counterfactual outcome, it is impossible to directly estimate individual-level causal effects. Holland (1986) referred to this fact as the *fundamental problem of causal inference*. Since individual level causal effects cannot be directly estimated, most studies report effects for well-defined populations. I report two quantities of interest for the causal effect of crisis on judicial outcomes in this study: the Average Treatment Effect (ATE) and the Average Treatment Effect for the Treated (ATT).

Quantities of Interest

The average treatment effect (ATE) provides a summary of the causal effect of treatment for a population defined as the difference in expected values for Y^1 and Y^0:

$$\begin{aligned} ATE &= E[Y^1 - Y^0] \\ &= E[Y^1] - E[Y^0]. \end{aligned} \tag{1.7}$$

Line two of equation 1.7 follows from the linearity of the expectation operator. The expected value of the difference between Y^1 and Y^0 is equivalent to the difference between the expected value of Y^1 and the expected value of Y^0. Therefore, we can use the sample information from individuals in the treated group Y^1 to estimate the population average $E[Y^1]$, and sample information from individuals in the control group Y^0 to estimate the population average $E[Y^0]$. Alternatively, the conditional average treatment effect for the treated (ATT) represents the effect of treatment on individuals in the treatment group. The

[36]Donald B. Rubin is the John L. Loeb Professor of statistics at Harvard University.

ATT can be written

$$\begin{aligned} ATT &= E[Y^1 - Y^0 \mid T = 1] \\ &= E[Y^1 \mid T = 1] - E[Y^0 \mid T = 1]. \end{aligned} \tag{1.8}$$

Both ATE and ATT are used to report causal effects in this project, although the average treatment effect for the treated is more directly related to my primary goal which is to determine the effect of crisis on cases decided during crisis. In the following section, I discuss two strategies for estimating the causal effects of crisis on judicial outcomes used in this project.

1.3.4 Research Strategies for Estimating Causal Effects

Randomized experiments offer one way to make causal inferences while satisfying many of the above assumptions. In randomized experiments, researchers have control over the assignment of individuals to treatment and control groups. Large sample sizes and randomization techniques break the association between potential confounding variables and treatment assignment. The average difference in outcomes between treatment and control groups can then be attributed to treatment and not some other confounding variable. But social scientists rarely have this type of control over the treatment assignment mechanism. This problem is most acute in observational studies where data are collected after treatment and other events of interest have occurred. All data used in the present project are observational in nature. Researchers collected data on court outcomes as well as other important features of the cases. Cases were either decided by the high courts during times of national crisis or during times of peace and it is impossible to rerun history, randomly assigning cases to crisis or peace. While randomization is a powerful tool for assessing causal effects, it is simply not an option for assessing how crisis affects judicial decision making. But case matching methods can approximate the experimental design found in randomized studies offering one way forward.

Case Matching Procedures

Donald Rubin (1973*b*, 1973*a*, 1976) introduced the concept of case matching to facilitate causal inference in observational studies. Matching procedures have become increasingly complex since those early days, but the motivation behind matching remains quite simple. Treatment and control observations are matched on confounding variables to minimize the differences between these groups. Some matching functions seek to reduce overall imbalance between treatment and control groups through mean-matching procedures. Other matching procedures seek to reduce differences within subgroups. And still other matching functions discard all but exact matches.

The goal of matching is to create a dataset of matched treated and control observations that differ only in the assignment of treatment. By doing so, the researcher can break the association between the treatment assignment mechanism and confounding variables, just as in a randomized experiment. Once matching has been conducted, the matched data are said to be balanced with respect to the confounding variables. Matching procedures can be thought of as a data pre-processing step, after which, simple differences in means between the control and treatment group can be calculated or additional parametric models can be used to estimate causal effects (Ho, Imai, King & Stuart 2007). In practice, simple difference of means between outcomes for control and treatment group are often reported as causal effects. However, this method should only be used in the case of exact matching, where treatment observations are matched exactly to control observations and no imbalances in the matched data remain with respect to the confounding variables. When exact matching cannot be achieved, additional modeling should be used to adjust for any remaining imbalance.

Analysis on Matched Data

Traditional modeling techniques can be used on matched data in the same way as if no matching procedure was used. For example, regression models can be used to generate model parameters and estimates of uncertainty after which predicted probabilities may be calculated to estimate the effect of treatment by taking the average predictive difference between treatment and control groups.

Alternatively, since the counterfactual model can be viewed as a problem of missing data, modeling techniques can be used to calculate the missing counterfactual outcomes. This approach involves fitting a model to the control observations, generating model parameters and estimates of uncertainty, and predicting outcomes for the treated observations. This step 'imputes' counterfactual outcomes for the treated group, answering the question what would have happened if the treatment had not occurred. An additional regression model is fitted to the treated observations, model parameters and measures of uncertainty are estimated, and predicted values for the dependent variable are calculated from this model for the control observations. This step 'imputes' the counterfactual outcomes for the control group. The average treatment effect (ATE) is the average difference between the observed and counterfactual outcomes whereas the average treatment effect on the treated (ATT) is the difference between observed outcomes and counterfactual outcomes for treated cases only.

1.4 Conclusion

During times of national crisis, governments enact policies designed to increase safety and enhance national security. Often these policies conflict with individuals' civil liberties. The crisis thesis suggests that during times of national crisis, the courts will be less supportive of civil liberties. This hypothesis is best formulated as a question of causal inference. Does

national crisis result in less judicial support for civil liberties claimants? The standard methodological tools of social science are not sufficient to address questions of causality that require additional assumptions. Randomized experiments have traditionally been used to determine treatment effects, but randomization is not an option in observational studies. Instead, other tools such as case matching procedures and counterfactual analysis provide an intuitive and theoretically defensible framework for estimating treatment effects.

This project is an extension of previous research on judicial decision making during crisis. First, I build on the current, best research on the crisis jurisprudence of the United States Supreme Court by investigating how the Court responded to civil liberties claimants and criminal defendants in the years following 9/11. Previous research has found that support for civil liberties claimants and criminal defendants wanes during previous periods of national crisis, but Epstein et al. report a paradoxical finding for the 2001 term of the Court. According to this study, the Court is *more* supportive of civil liberties during the 2001 term of the Court. Second, I generalize the crisis thesis beyond the American context through an empirical analysis of crisis decision making by the Indian Supreme Court. This court provides an appropriate test case since it shares many similar features with the United States Supreme Court. The Supreme Court of India was formed out of the English common law tradition and the Indian Constitution places its high court in a similar position of authority and independence as the United States Supreme Court. In addition, India experienced periods of national crisis and peace over a 10 year span that offers a comparable research design to my analysis of the U.S. Supreme Court. Furthermore, the Supreme Court of India publishes information on the cases it decides through an online portal which makes data collection for this Court possible.

In Chapter 2, I begin with a discussion of the current state of research on the crisis thesis in the United States. I then present specific testable hypotheses, a description of the

data used in the analysis, and results from my empirical investigation. Chapter 3 is set up similarly, beginning with a discussion of current research on the Court of India. I present an overview of the Supreme Court and the crises, and develop specific testable hypotheses that generalize from the crisis thesis. This discussion is followed by a description of the data and results from empirical analyses. In Chapter 4 I offer a summary of the findings from the project and make some concluding remarks about the state of research on crisis jurisprudence.

Chapter 2

Crisis and the United States Supreme Court

> In any civilized society the most important task is achieving a proper balance between freedom and order. In wartime, reason and history both suggest that this balance shifts to some degree in favor of order—in favor of the government's ability to deal with conditions that threaten the national well-being.
>
> Chief Justice William H. Rehnquist (1998, 222)

During times of war and national crisis governments adopt policies to bolster national security and restore order. Often, these policies conflict with pre-crisis notions of individual liberties guaranteed by the Constitution, giving rise to litigation. According to the crisis thesis judges are less likely to rule in favor of civil liberties claimants and criminal defendants during crisis. Variants of the crisis thesis suggest that: judicial preferences shift in the conservative direction during crisis, judges show more deference to the elected branches and especially the executive, and the effect of crisis depends on the type of case, litigants, or the case's connection to the crisis. Previous empirical research has found support for the general claim that crisis reduces support for civil liberties at the U.S. Supreme

Court, but the timing of this research did not allow for a full analysis of Supreme Court decision making in the post-9/11 era (Epstein et al. 2005). The authors conjectured though that if the U.S. engaged in a long war on terror, judicial preferences would shift in the conservative direction resulting in fewer victories for civil liberties claimants and criminal defendants.

On September 14, 2001, President George W. Bush declared a state of national emergency[1] in response to the devastating terrorist attacks. Congress subsequently passed two major pieces of legislation, the Authorization for Use of Military Force (AUMF),[2] and the USA PATRIOT Act.[3] The AUMF authorized military force "against those nations, organizations, or persons" (Grimmett 2007, 1) who planned, authorized, committed, or aided the 9/11 terrorist attacks. The Bush administration relied heavily on the AUMF as justification for a Global War on Terror (GWOT). In a joint session of Congress, President Bush declared, "Our war on terror begins with Al Qa[i]da, but it does not end there. It will not end until every terrorist group of global reach has been found, stopped, and defeated" (Bush 2001, September 20, 2001). The USA PATRIOT Act was designed to give law enforcement and foreign intelligence personnel greater latitude in tracking and intercepting communications, enhance the regulatory power of the Secretary of Treasury to combat corruption in U.S. financial institutions, and codify crimes, penalties, and procedures against domestic and international terrorists.[4]

Eleven years have passed since the tragic events of 9/11 and little has been done to understand the impact of this crisis on U.S. Supreme Court decision making. What, if

[1]See Proclamation 7463 of September 14, 2001, in the Federal Register 66:181, page 48199 (retrieved from http://ra.defense.gov/documents/mobil/pdf/proclamation.pdf on November 1, 2010).

[2]The Senate passed S.J.Res. 23 on September 14, 2001, before 11am; The House passed the bill later that evening, and the President signed it into law as P.L. 107-40, 115 Stat. 224 (2001) on September 18, 2001 (Grimmett 2007).

[3]Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), P.L. 107-56, 115 Stat. 272 (2001).

[4]See the Congressional Research Service report entitle, *The USA PATRIOT Act: A Sketch* (Doyle 2002).

any, effect did the 9/11 crisis have on U.S. Supreme Court decision making? Did 9/11 and the prolonged war on terrorism result in more conservative outcomes in civil liberties and criminal appeals cases as suggested by Epstein et al. (2005)? Did individual justices' preferences shift to the right in response to the 9/11 crisis? If crisis did impact judicial outcomes, how long did the effects last? In the following section I review the current state of the literature on crisis decision making in U.S. courts. Following this review, I present testable hypotheses and discuss the data and methods for an empirical analysis of U.S. Supreme Court decision making in civil liberties and criminal appeals cases. I then present the empirical results and discuss the major findings of this study.

2.1 Review of Research on Judicial Decision Making During Crisis

Without a doubt, research on the crisis thesis was spurred on by the 9/11 terrorist attacks and subsequent domestic and foreign policy initiatives of President George W. Bush's administration geared toward combating foreign and domestic terrorism. The current empirical evidence for a crisis effect on judicial outcomes can best be characterized as a mixed bag of results. Studies have been conducted on the federal district courts, the court of appeals, and on U.S. Supreme Court decision making, but the unit of analysis is non-standard across studies, case selection methods vary, and empirical methodologies are not directly comparable. Needless to say, various conclusions emerge from these works. In this section, I offer a brief review of the current state of the literature on crisis decision making in U.S. Courts beginning with the lower federal courts.

2.1.1 Crisis in the Lower Federal Courts

Collins et al. (2008) examined 48,025 civil liberties cases decided between 1938 and 2004 by U.S. district courts. These cases fell into the broad issue categories of alien petitions, criminal rights, discrimination, freedom of expression, freedom of religion, habeas corpus, military exclusion, and right to privacy. The unit of analysis for this study was the individual judge vote. The models were standard logistic regression models with variations on how crisis was defined.[5] War and crisis were coded separately as dichotomous variables where 1 indicated presence of war / crisis and 0 indicated peace. No reported model specification yielded a significant result for either war or crisis and the substantive effect suggested that judges were 1% more likely to vote in the liberal direction during war or crises. The inconsistent finding lead the authors to consider whether men and women responded differently to war, concluding that women were 6.5% more likely to uphold a civil liberties claim during war compared to men.[6]

Clark (2006) turned attention to the federal courts of appeals, examining 1,490 randomly sampled criminal appeals cases and 2,715 non-criminal cases involving executive discretion. The cases spanned almost 100 years (1904 - 2003). Non-criminal cases were identified through a Westlaw search for "constitutional law", "the United States", or "war and national emergency." The unit of analysis was the individual judge vote and logistic regression was used to estimate individual models. The authors found that courts of appeals judges were more likely to uphold a criminal conviction during war, Republican appointees were more likely to convict than Democratic appointees, and relatedness to war decreased the probability of upholding a criminal conviction. This finding offers some evidence that crisis shifts courts of appeals judges' preferences in the conservative

[5]The authors define wars as World War II, the Korean War, the Vietnam War, the Persian Gulf War, and the war in Afghanistan. The crises included the Berlin Blockade, the Cuban Missile Crisis, the Iran Hostage Crisis, and the War on Terror.

[6]This finding did not hold for decision making during periods crisis.

direction, at least in criminal appeals cases. But, the pattern was reversed for non-criminal executive discretion cases where presence of a war or crisis appears to decrease support for the executive by about 10%.

Sunstein (2008) also cast an eye to the federal appellate courts in his working paper which tested court deference to the executive during crisis by looking at invalidation rates — the rate at which the federal government loses cases. The data set was comprised of 111 cases decided between September 11, 2001, and September 10, 2008, that "seriously engage[d] national security issues," (Sunstein 2008, 7). The unit of analysis was the individual judge vote and the quantity of interest was simply the invalidation rate. No statistical model was used. The author concluded that invalidation rates were relatively low but not so low to support a claim that judges adopted a broad rule of deference to the executive. Democratic and Republican appointees varied significantly in their voting patterns, but not more than in other areas of the law. Republican appointees were approximately 10% less likely to rule against the executive compared to Democratic appointees. Finally, the author suggested that invalidation rates should change over the period of analysis and this would be evidence of a crisis effect. However, invalidation rates did not significantly increase/decrease over time, suggesting no effect for the 9/11 crisis.

At best, these studies lend limited support for the crisis thesis in the lower federal courts. However, since data sources and methodologies varied greatly, it is difficult to make direct comparisons. According to these studies, crisis may influence female judges, but not necessarily men. Crises increased conviction rates of criminal defendants, but had no effect on non-criminal cases. And there might be either less or more support for the executive during crisis. In the next section, I discuss two recent articles that considered the effect of crisis on U.S. Supreme Court decision making.

2.1.2 Crisis in the Supreme Court

The traditional approach to studying crisis decision making generally involves focusing on a few seminal cases or tracing the history of a particular line of cases through periods of crisis and peace.[7] Epstein et al. (2005) however, broke new ground in their study of judicial decision making during crisis by providing the first large-scale empirical evaluation of crisis decision making by the U.S. Supreme Court. The authors analyzed 3,344 civil liberties cases[8] decided between the 1941 and 2001 terms of the Court. They focused on outcomes of cases rather than individual judges' votes in cases. And, prior to their study, much of the theoretical focus on crisis decision making was limited to war-time cases, but as the authors note, definitions of crisis are based on normative choices, not verifiable fact. Strictly defining crisis as a declared state of war limits any empirical evaluation and does not necessarily reflect post-World War II U.S. foreign policy. Accordingly, the authors developed a three-part definition of crisis which included wars, international conflicts as identified by the International Crisis Behavior Project[9], and rally effects, defined as a ten point or more shift of public opinion in support of the president following an international event. Table 2.1 provides a complete listing of the crises as identified by Epstein et al. with their corresponding beginning and ending dates.

Epstein et al. employed a variety of case-matching techniques to match treated cases (cases decided during crisis) to control cases (cases decided during peacetime). The goal of the matching procedure was to create a matched dataset where treated and control observations were as similar as possible on all relevant confounding (control) factors.

[7] See for example Chafee's (1919) early work on free speech during wartime, Linfield's (1990) expansive coverage of individual rights during wars beginning with the Revolutionary War, and Stone's (2003) extensive treatment of seminal civil liberties cases during wartime.

[8] Civil liberties cases as coded in the Supreme Court Database include: criminal procedure, civil rights, First Amendment, due process, privacy, and attorneys.

[9] The original source material used in the Epstein et al. study was taken from: Michael Brecher & Jonathan Wilkenfeld, International Crisis Behavior Project, 1918-2001 (ICPSR Study No. 9286, 2004). Version 10 of the International Crisis Behavior Project has now been released. The dataset and all associated codebooks and documentation are available for download at `http://www.cidcm.umd.edu/icb/`.

Table 2.1: Crises Since World War II

Crisis	Begin Date	End Date
World War II	12/7/1941	8/14/1945
Berlin Blockade	6/24/1948	5/12/1949
Korea	6/27/1950	7/27/1953
The Cuban Missile Crisis	10/14/1962	10/28/1962
Vietnam	2/7/1965	1/27/1973
Iran Hostage Crisis	11/4/1979	1/20/1981
Gulf War I	1/16/1991	4/11/1991
9/11 Terrorist Attacks	9/11/2001	end of dataset
Afghanistan	10/7/2001	end of dataset
14 Additional Rally Effect	See Appendix A.1	

Variations in types of cases, litigants, or other case characteristics for example may influence case outcomes and also may vary systematically with the absence / presence of national crisis. Case matching techniques, like those employed in Epstein et al. (2005), are an increasingly popular choice for controlling for the effects of confounding factors in causal analysis. After the matching procedure was completed, the authors calculated the average treatment effect of crisis by taking the average difference in support for civil liberties across the matched dataset.

The authors concluded that the Court adopted a crisis jurisprudence leading to decreased support for civil liberties during crisis. Support for civil liberties claims dropped by about 10% during periods of crisis. However, the reported estimated effect of crisis for the 2001 term suggested a departure from this general finding. The authors report that crisis increased support for civil liberties during the 2001 term of the Court.[10] Despite this finding, the authors conjectured that a long war on terrorism should produce a "sharp turn to the right in ordinary civil liberties decisions," (Epstein et al. 2005, 95). Due to the timing of the release of this study, only one term of the Court following the 9/11 terrorist

[10]See Figure 9 of Epstein et al. (2005, 81) which decomposes the Average Treatment Effect of crisis by term of the Court.

attacks was available for empirical analysis. Yet, as we now know, the Global War on Terrorism[11] resulted in two major conflicts spanning more than a decade.[12] The analysis presented in this project updates the work of Epstein et al. through complimentary methods and additional years of data for the 9/11 period. The Epstein et al. project provided broad support for the crisis thesis with respect to court outcomes, but their analysis did not consider the impact of crisis on individual judges. This task was taken up by Javaid & Mak (2007).

Javaid & Mak (2007) analyzed all civil liberties cases decided by the U.S. Supreme Court between 1941 and 2001. The unit of analysis was the individual justice vote which produced 28,837 votes over 3,323 cases. The authors estimated a hierarchical model with justice votes nested within cases. The authors argued that crisis can only be thought of as a meaningful constraint on individual judges if it causes judges to vote conservatively in spite of their own preferences. Conservative judges, for example should generally be expected to vote conservatively regardless of the presence / absence of crisis. However, if moderate and liberal judges vote more conservatively during crisis, we might say that crisis constrains these judges voting behavior in a manner consistent with the expectations of the crisis thesis.

In order to test the crisis as constraint hypothesis, the authors created two dichotomous variables to indicate whether a particular judge was conservative, moderate, or liberal during a particular term. Judges were coded *conservative* if their Segal-Cover ideology score (Segal 1984) fell at least one standard deviation more conservative than the term mean, and judges were coded as *liberal* if their ideology score fell at least one standard

[11] President George Bush announced the Global War on Terrorism in a speech delivered to Congress on September 20, 2001 (Bush 2001).

[12] The invasion and subsequent war in Afghanistan began on October 7, 2001, and continues to the present day. The invasion of Iraq occurred on March 19, 2003. An end of combat operations in Iraq was announced by President Barack Obama on August 28, 2010, in his weekly address and on December 15, 2011, Defense Secretary Leon Panetta officially declared that war over.

deviation more liberal than the term mean. Reported results suggested the 9/11 crisis had no substantive impact on conservative judges' decision making and only slightly increased (about 3%) conservative voting by moderate and liberal judges, but only in the presence of a rally effect.[13]

Taken together, these studies lend support to the claims that crisis reduces support for civil liberties claimants in the U.S. Supreme Court. But additional research is needed to determine whether similar patterns hold true for the post-9/11 period. In the next section I present my working hypotheses and provide an overview of the data and methods used in the following empirical analyses.

2.2 Hypotheses, Data, and Methods

During times of national crisis, Congress, the public, and quite possibly the courts rally behind the president in a climate of hyper-patriotism which bolsters executive discretionary authority. The government adopts policies to better manage the crisis, increase the safety and security of the nation, and restore public confidence in the government. When these policies conflict with individual civil liberties, injured parties go to the courts for relief. According to the crisis thesis, the courts are less sympathetic to civil liberties claimants during crisis. The courts rule against civil liberties claimants and uphold criminal convictions that might otherwise have been overturned in a time of peace. I test the following hypotheses in relation to U.S. Supreme Court outcomes in civil liberties cases, and criminal appeals cases:

H1 Observed outcomes in U.S. Supreme Court civil liberties cases decided during crisis will be more conservative than would be expected if no crisis had occurred.

[13] A rally effect was defined as a 10% increase in public support for the president.

H2 Observed outcomes in U.S. Supreme Court criminal appeals cases decided during crisis will be more conservative than would be expected if no crisis had occurred.

The Supreme Court however is not a monolithic entity. It is made up of nine individual justices who bring their own policy preferences to each case. Judges, like the rest of the population may vary in their responses to crisis. Research following 9/11 found that while some Americans experienced a great deal of anxiety and preferred an isolationist response, a majority of Americans felt threatened by the terrorist attacks and supported the Bush administration's domestic anti-terrorism policies and a militarized international response (Huddy et al. 2005). How did the 9/11 crisis impact the individual decision makers sitting on the U.S. Supreme Court? Crisis may affect all judges equally, moving their preferences over civil liberties to the right and toughening their stance toward criminal defendants. But conservative judges are generally expected to vote in the conservative direction in civil liberties and criminal appeals cases. Therefore, the effect of crisis for the most conservative voting judges may be small or indiscernible.

Consider the relative ideological positions of the justices using the well-known Segal-Cover scores (1984) shown in Figure 2.2.[14] Associate Justice David H. Souter is the median justice. Chief Justice William H. Rehnquist and Associate Justice Antonin Scalia are at least one standard deviation more conservative than the median. And Associate Justice Ruth Bader Ginsburg, the most liberal justice, is at least one standard deviation more liberal than the median. According to this scale, the most conservative justices, Rehnquist and Scalia, are approaching a theoretical limit for 'conservativeness', and consequently, they should be expected to vote conservatively most of the time, regardless of the presence of crisis. Crisis may however move more moderate and liberal justices in the conservative direction without altering their relative ideological placement. For example, Justice Ginsburg may

[14]This discussion is offered purely as motivation for the following hypotheses regarding individual justice's voting behavior.

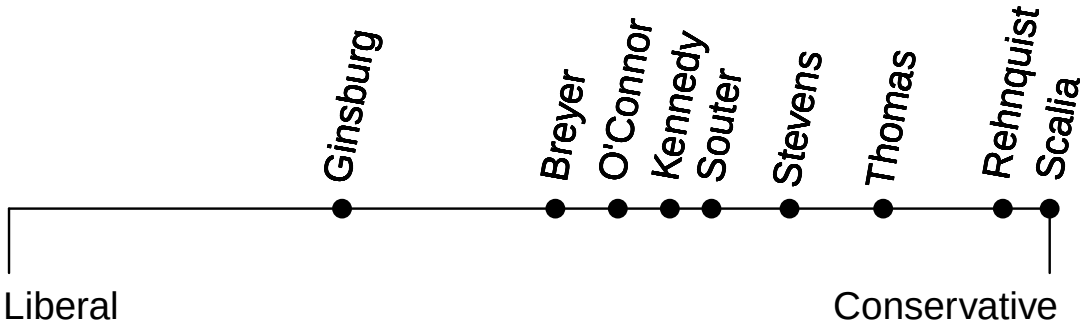

Figure 2.1: Relative Ideological Placement of the U.S. Supreme Court Justices Based on Segal-Cover Scores

move to the right by a considerable amount and still be the most liberal justice on the bench. With this in mind, I posit:

H3 Crisis will increase conservative voting for moderate and liberal U.S. Supreme Court justices in civil liberties cases and criminal appeals cases, and the effect will be most pronounced for the liberal-most justice.

2.2.1 The Data

Much of the data needed for an empirical assessment of the U. S. Supreme Court's post-September 11 decision making were obtained from the U.S. Supreme Court Database.[15] The Supreme Court Database includes data on case outcomes, individual justices' votes, and other important case characteristics such as the parties to the case, issues, and lower court treatment. The Supreme Court Database website also serves as a repository for supplementary data often used in studies of judicial behavior such as case salience and

[15]The Supreme Court Database Version 2011 Release 3 and supporting documentation were downloaded from `http://scdb.wustl.edu`.

ideology scores of the justices. In this section, I provide an overview of the operationalization of the 9/11 crisis period, the case selection methodology, and the dependent and independent variables.

Operationalizing Crisis

Much of the crisis literature focuses on wars and to a lesser extent, international crises. But does 9/11 and the period following constitute a period of national crisis in the United States? Put another way, is the 9/11 crisis and ensuing conflicts in Afghanistan and Iraq appropriate for the purpose of studying crisis decision making in the courts? The war on terrorism has widely been acknowledge to be a unique kind of war. John Yoo, former Deputy Assistant Attorney General in the Office of Legal Counsel for the Bush Administration at the time of the attack, acknowledged the uniqueness of the 9/11 attacks and a subsequent shift in administration policy stating, "...the events of 9/11 itself were unprecedented, which forced our government to reexamine old assumptions, to reconsider policies, and to rededicate itself to protecting the national security against a new foe" (Yoo 2006, vii). Conflict resolution literature distinguishes a crisis as a situation that produces a "threat to basic values" with a "high probability of involvement in military hostilities" and a "finite time for response to the external threat" (Brecher 1979, 446). Considering the magnitude of the attacks, the rapid-response of Congress and the Bush Administration, and the lasting impact on public opinion, the post-9/11 era including the U.S. wars in Afghanistan and Iraq seems like a good candidate for a national crisis.

I defined the 9/11 crisis beginning on September 11, 2001, and continuing through the remainder of the natural court. *Crisis* was coded as a dichotomous variable taking the value of 0 for all cases argued prior to September 11, 2001, and 1 for all cases argued on or after that date.[16] Alternatively, the 9/11 crisis could have been coded as beginning on

[16]I used the date of oral argument rather than the date of the Court's opinion since the date of oral

October 7, 2001, which was the beginning of Operation Enduring Freedom (the war in Afghanistan).[17] The Supreme Court convened its 2001 term on October 1, 2001,[18] and only two cases in the dataset were argued between October 1 and October 7.[19] Had the later date been chosen, these cases would have been coded as non-crisis cases but this decision had no substantive impact on the reported results.

Case Selection Methodology

I included cases decided by the natural court beginning with the arrival of Associate Justice Stephen Breyer on August 3, 1994, and ending with the death of Chief Justice William H. Rehnquist on September 28, 2005. The decision to limit investigation to this natural court fit the overall objectives of this project and provided an important control for personnel changes on the Court which has not been present in previous studies. Following Epstein et al., I analyzed orally argued civil liberties cases with a signed written opinion. Civil liberties cases are defined as cases involving attorneys rights, civil rights, criminal procedure, due process, the First Amendment, and privacy.[20] The resulting dataset was composed of 469 cases. Criminal appeals cases made up 45.4% of the cases and civil liberties accounted for the remaining 55.6%. Figure 2.2 shows the number of criminal appeals cases and all other civil liberties cases by term of the Court.[21]

argument is closer in proximity to the date the Court generally votes on the disposition of cases (Epstein & Knight 1997, Epstein et al. 2005).

[17]For a brief history of Operation Enduring Freedom, see "The United States Army in Afghanistan: Operation Enduring Freedom", available at `http://www.history.army.mil/brochures/Afghanistan/Operation%20Enduring%20Freedom.htm#intro`.

[18]U.S.C. 28 §2 The Supreme Court shall hold at the seat of government a term of court commencing on the first Monday in October of each year and may hold such adjourned or special terms as may be necessary.

[19]The Supreme Court heard oral arguments in Correctional Services Corporation v. John E. Malesko on October 1, 2001, and in Chickasaw Nation v. United States on October 2, 2001.

[20]Following the terms and instructions in the Supreme Court Database Codebook (August 30, 2011), this selection corresponds to decisionType 1 and 7 and issueAreas 1, 2, 3, 4, 5, and 6.

[21]A complete table of the number of cases by all issue areas and terms is provided in Appendix A.2.

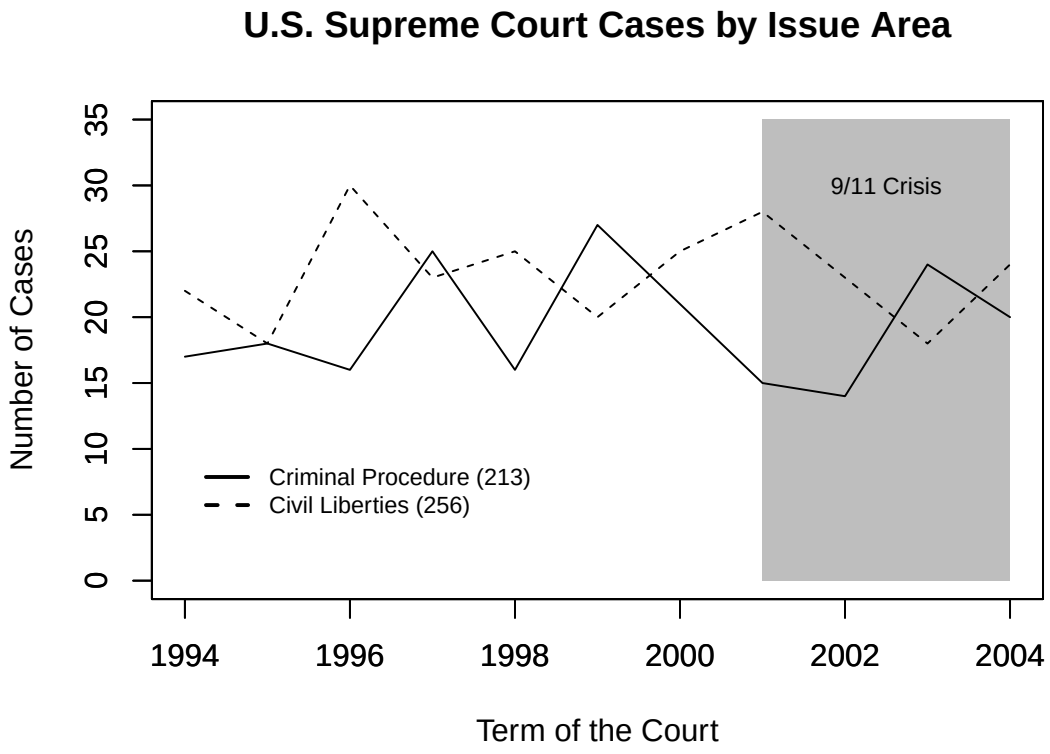

Figure 2.2: Distribution of U.S. Supreme Court Cases by Term and Issue

The Dependent Variables

The dependent variables used in this analysis were case outcomes and individual judges' votes. Both dependent variables were recorded as dichotomous variables where the variable took the value of 1 for liberal outcomes and 0, for conservative ones. With respect to 'liberal' and 'conservative' outcomes, I adopted the coding method used by the Supreme Court Database. Outcomes favoring individuals accused of or convicted of crimes and outcomes favoring civil liberties claimants were coded as liberal outcomes. Table 2.2 presents a summary of the Supreme Court Database coding rules for ideological direction of outcome variables.

Table 2.2: Coding Scheme for Ideological Direction of Outcomes

Issue Area	Liberal Direction Favors:
Criminal Appeals	Person accused or convicted of a crime
	Person denied a jury trial
Civil Liberties	Civil rights or liberties claimant
	Child or juvenile
	Indigent
	Native American
	Affirmative action claimant
	Female in abortion cases
	Underdog

Note. The full coding scheme for the ideological outcome of cases and other variables is available in "Supreme Court Database Code Book 2011 Release 3," available at http://scdb.wustl.edu.

Figure 2.3 shows the percentage of liberal case outcomes in civil liberties cases, and criminal appeals cases over time. The 1996 term of the Court saw the fewest number of liberal outcomes overall, with only 34% of cases decided in favor of civil liberties claimants or criminal defendants. This term also reported the fewest liberal outcomes for each of the two issue areas. Only 25% of criminal appeals cases were decided in favor of criminal defendants and 40% of civil liberties claimants won. Liberal outcomes increased to 60% in

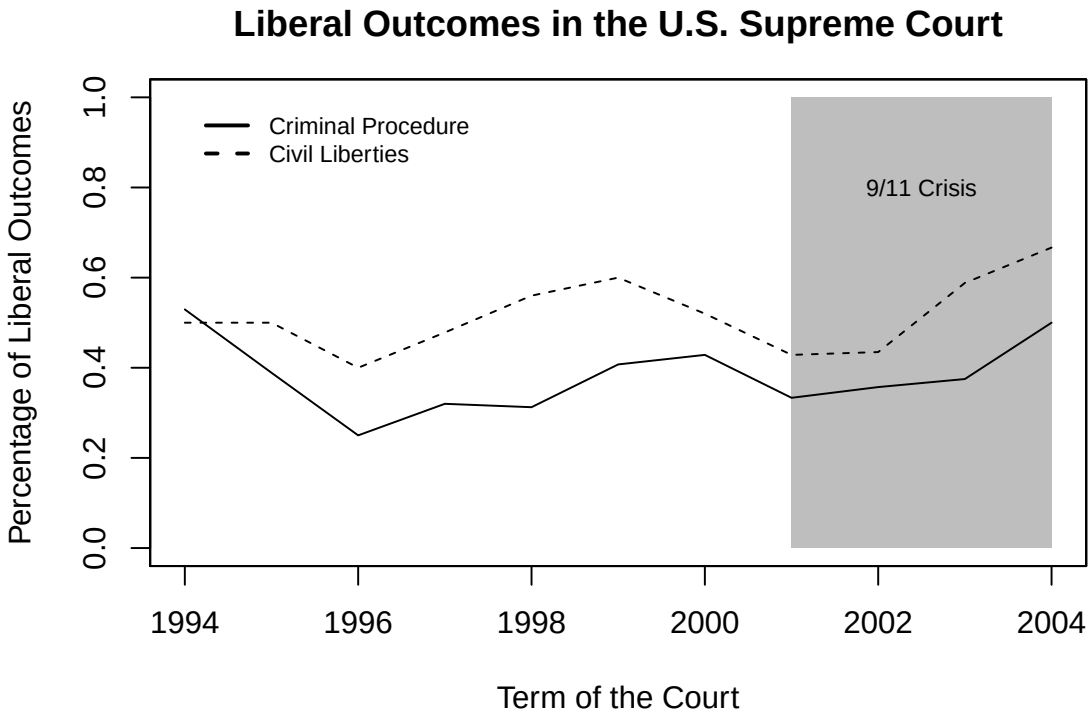

Figure 2.3: U.S. Supreme Court Support for the Liberal Position in Civil Liberties and Criminal Appeals Cases

civil liberties cases during the 1999 term, only to decline again during the 2000 and 2001 terms. Criminal appeals case outcomes became more liberal in 1999 and 2000, but declined again in the 2001 term. The liberal outcomes trended up over the 9/11 crisis period. The unadjusted percentages of liberal outcomes for civil liberties cases, and criminal appeals cases during the 9/11 crisis period do not seem to fit with the general expectations of the crisis thesis - that crisis leads to more conservative outcomes in civil liberties cases, and criminal appeals cases. However, the raw percentages do not tell the whole story. In order to fully test the crisis thesis, more information is needed. What outcomes would have been obtained had the 9/11 crisis been averted? Would there have been even more liberal outcomes during this period?

Figure 2.4 shows percentage of liberal votes cast in civil liberties cases and criminal

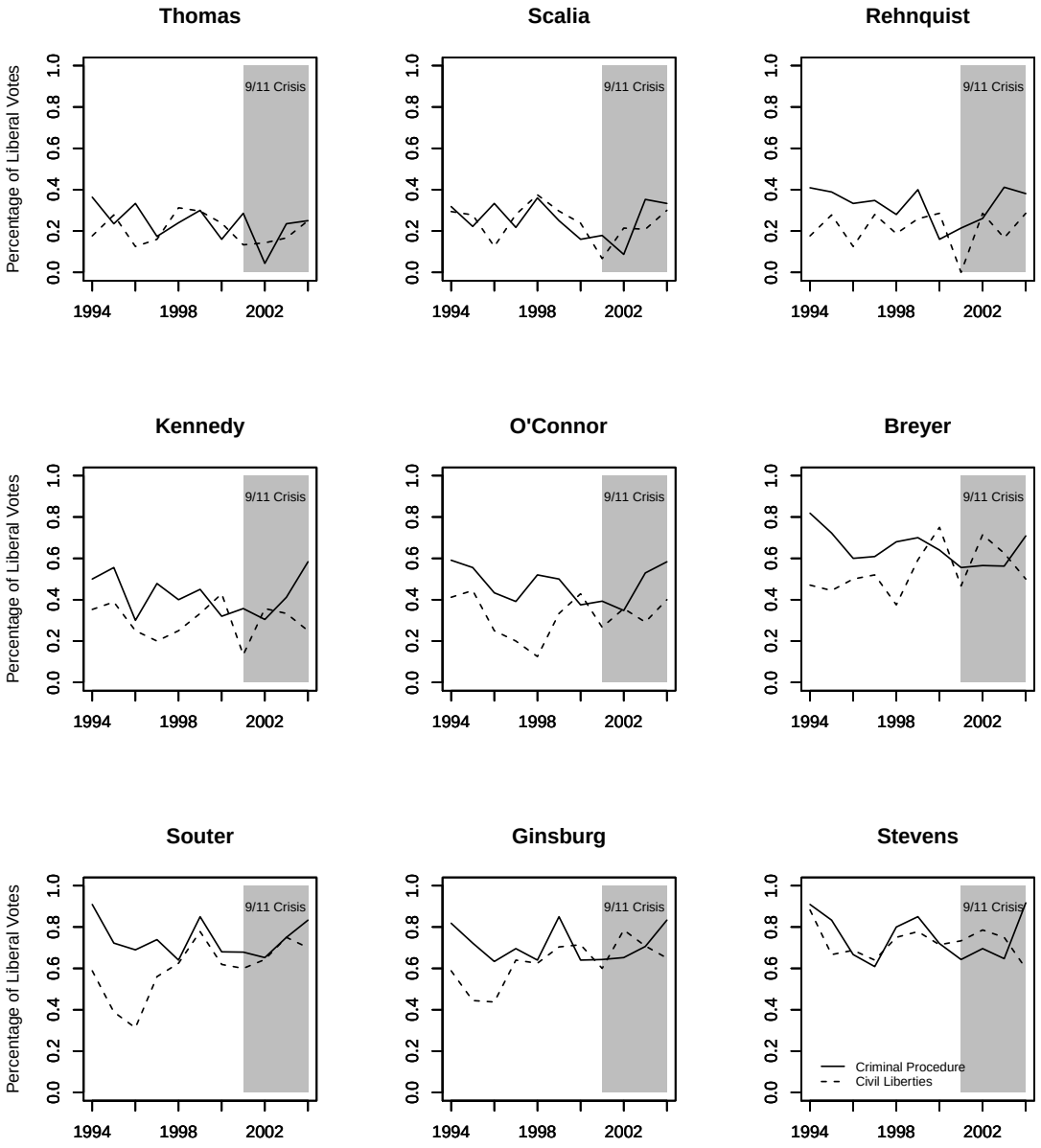

Figure 2.4: U.S. Supreme Court Justices' Support for the Liberal Position in Civil Liberties and Criminal Appeals Cases

appeals cases for each justice over time. The panels were ordered by average support for a liberal outcome. Unsurprisingly, Justices Thomas, Scalia, and Rehnquist appear to show lower average support levels for liberal outcomes while Justices Souter, Ginsburg,

and Stevens show high liberal voting patterns. But the important features to note from these graphs are the patterns before and after the 9/11 crisis for each justice. Liberal voting in civil liberties cases appears to decline somewhat for two conservative justices during the 2002 term, but other justices appear to remain at or near the same level as before crisis. Liberal voting appears to be on the rise by the 2003 and 2004 terms. A majority of justices do appear to cast fewer liberal votes in criminal appeals cases during the 2001 term, but again, the dip appears short-lived. By the 2003 and 2004 terms, support for liberal outcomes in criminal appeals cases was on the rise for all justices.

The Independent Variables

Previous research suggests that case characteristics (Segal 1984), the political ideology of the justices and the court (Epstein & Knight 1997, Segal & Spaeth 1993, Segal & Spaeth 2002), the lower court's treatment of a case (Caldeira & Wright 1988, Collins 2007, Segal & Spaeth 1993, Segal & Spaeth 2002), and case salience (Baird 2004, Epstein & Segal 2000, Richard L. Pacelle, Curry & Marshall 2011) impact judicial outcomes. In this section I present an overview of the various independent variables used as controls in this study. Table 2.3 provides a summary of the number of cases with specific values on the independent variables by issue area.

Four variables available in the Supreme Court Database give information about the type of case and legal issues coming before the Court: *issue*, *issueArea*, *lawType*, and *lawSupp*. Issue and issue area capture the primary subject matter of cases while law supplement and law type provide more specific information about the legal issues raised in a case. I relied on the issue area and law supplement variables for sub-setting analyses by issue and matching similar cases on specific legal provisions. The issue area variable was used to subset the data for three separate sets of analyses: an analysis of all civil liberties cases and criminal appeals cases combined, and separate analysis for criminal appeals and

Table 2.3: Summary of Control Variables by Issue Area

Control Variable	Civil Liberties	Criminal Appeals Cases
Issue Area	256	213
Law Supplement		
First Amendment	52	0
Fourth Amendment	3	33
Fifth Amendment	15	16
Sixth Amendment	0	17
Fourteenth Amendment	41	7
Age Discrimination	22	0
Habeas Corpus	2	37
Federal Rules of Procedure	1	16
Other Legal Provision	70	22
No Legal Provision	50	65
Lower Court Direction		
Liberal Outcome	149	90
Conservative Outcome	105	123
Lower Court Disagreement	94	67
Government a Party	195	207
Government is Petitioner	123	90
Government is Respondent	90	120
Combined Salience	92	28
NYT Salience	73	22
CQ Salience	68	17
1 Legal Provision	173	181
More than 1 Legal Provision	82	213

civil liberties. The law supplement variable offers more specific information regarding the legal issues raised in the cases. There were 59 unique values for law supplement in the dataset including "no legal provision." For this analysis, I collapsed the law supplement variable into 10 categories representing: the First Amendment, Fourth Amendment, Fifth Amendment, Sixth Amendment, Fourteenth Amendment, age discrimination, habeas corpus, federal rules of procedure, other legal provision, and no legal provision. The Sixth Amendment and Federal Rules categories had the fewest number of cases. The

First Amendment was the largest substantive category (excluding the other and no legal provision categories), closely followed by the Fourteenth Amendment category.

Lower court direction, whether the lower court returned a liberal or conservative outcome, and lower court disagreement as noted by the Supreme Court provide information about the lower court's treatment of a case. According to some versions of the crisis thesis, the Supreme Court gives extra deference to the executive when it is involved in a case. Therefore, I created three dichotomous indicators to denote whether the government was a party in a case, whether the government was the respondent, or the petitioner.

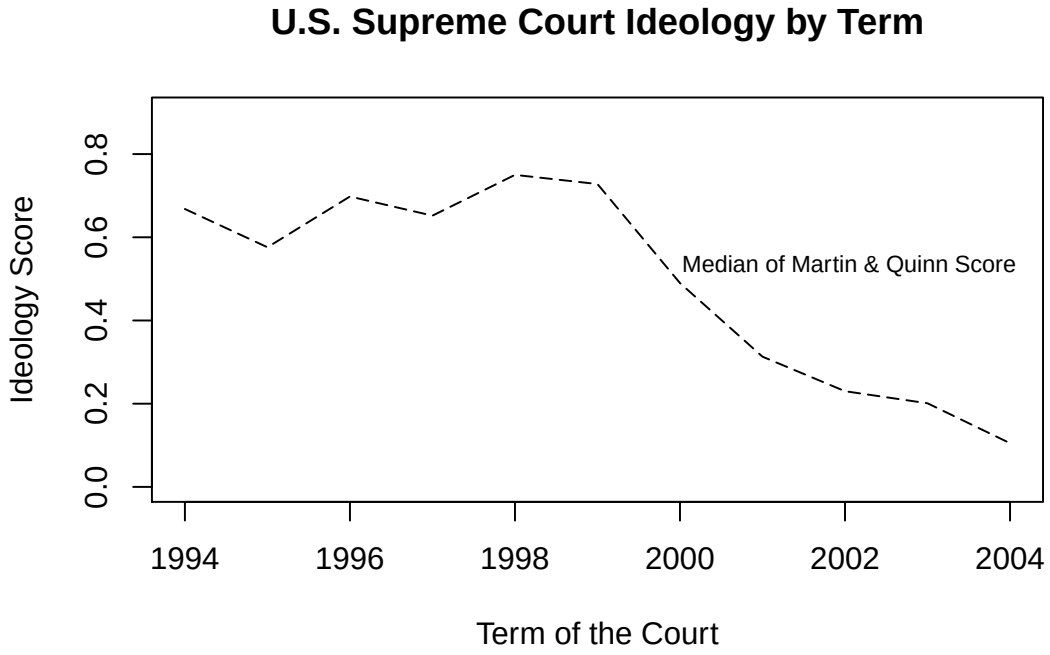

Figure 2.5: Median U.S. Supreme Court Ideology by Term.

I adopted three measures of case salience: the Epstein & Segal (2000) measure of case salience, *Congressional Quarterly's* (Savage 2010) measure of landmark cases, and combined measure of these two approaches. Epstein & Segal defined salient cases as those cases receiving front page coverage in the *New York Times* while *Congressional Quarterly* codes

landmark cases which may be particularly salient given their relative importance. The Epstein & Segal measure produced 95 salient cases, while the *Congressional Quarterly* measure produced 85 landmark cases. Combining these two measures yielded 120 salient crisis cases. Finally, I used the Martin and Quinn (Martin & Quinn 2002, Martin & Quinn 2007) ideal point estimates to construct a measure of the median ideology of the Court over time. Figure 2.5 shows the resulting measure of ideology used in this analysis.[22]

2.2.2 Methods

What is the causal effect of crisis on U.S. Supreme Court outcomes? Does the Court rule against civil liberties claimants with more regularity during crisis? Does crisis condemn criminal defendants that might have otherwise gone free during a time of peace? How does crisis affect the individual justices of the Supreme Court? Are they all moved by crisis in the same way or do the effects of crisis vary by judge? In this section, I define the primary quantities of interest used to answer these questions and provide an overview of the methods necessary to estimate the causal effects of crisis.

Quantities of Interest

I defined two quantities of interest to represent the causal effect of crisis: the Average Treatment Effect (ATE) and the Conditional Average Treatment Effect for the Treated (ATT). The ATE is defined as the average difference in expected values for two outcomes Y^1 and Y^0:

$$\begin{aligned} ATE &= E[Y^1 - Y^0] \\ &= E[Y^1] - E[Y^0], \end{aligned} \tag{2.1}$$

[22]Mean ideology could not be included in the matched case analysis since there were no control cases with identical values on ideology to match to treated cases. Ultimately, ideology in this context is controlled for by restricting analysis to the natural court.

where Y is a population level response variable with individual realizations y which take the value of 1 for a liberal outcome and 0 otherwise. The superscript denotes the presence (1) or absence (0) of crisis. The ATE can be thought of as a total effect of crisis as it contemplates both the effect of crisis on crisis cases and the effect of crisis on *non-crisis* cases. Alternatively, the ATT is the effect of crisis on cases decided during crisis. Previous studies generally report only the ATE - the total effect of crisis. But the implicit assumption here is that crisis has an effect even on those cases that were decided during peace. I report both the ATE and the ATT which I believe is a more compelling measure of the effect of crisis. By including both measures of the effect of crisis, I present the reader with a more comprehensive view of the estimated effects and guard against potential statistical slight-of-hand. The calculation for the ATT can be written:

$$\begin{aligned} ATT &= E[Y^1 - Y^0 \mid T = 1] \\ &= E[Y^1 \mid T = 1] - E[Y^0 \mid T = 1], \end{aligned} \tag{2.2}$$

where the | operator is read as *conditional on*, and $T = 1$ denotes the presence of crisis. The ATT is the average expected difference in outcomes for cases decided during crisis that would be realized if we could simultaneously observe case outcomes under crisis (observed) and under no crisis (counterfactual). But, it is impossible to observe both Y^1 and Y^0 simultaneously — a phenomenon described as the *fundamental problem of causal inference* (Holland 1986).

Consider the potential outcomes listed in table 2.4. During crisis, when $T = 1$, the outcome Y^1 is directly observable but the outcome Y^0 is not. The unobservable *potential* outcome Y^0 is sometimes referred to as a *counterfactual* outcome. Similarly, the outcome Y^0 is observable while $T = 0$, but Y^1 now is a counterfactual outcome. Under the potential outcomes framework, counterfactual estimates are needed to estimate causal effects described by equation 2.1 and 2.2. I used four methods for estimating counterfactual

Table 2.4: The Fundamental Problem of Causal Inference

	No Crisis ($T = 0$)	Crisis ($T = 1$)
Outcome under no crisis (Y^0)	Observed	Unobserved
Outcome under crisis (Y^1)	Unobserved	Observed

outcomes: logistic regression and a multilevel model, case matching techniques, and regression after matching. In the following sections, I introduce the statistical models employed in this analysis, discuss counterfactual estimation techniques, and provide an overview case matching procedures before moving on to the empirical analysis and results.

Statistical Models

The logistic model is appropriate for modeling both case outcomes and individual justice votes since both measures are dichotomous dependent variables which take the value of 1 for a liberal outcome and 0 for a conservative outcome. I specifid logistic regression models that take the general form:

$$\begin{aligned} Pr(y_i = 1) &= logit^{-1}(\alpha_i + \beta^1 x_i^1 + \beta^2 x_i^2 ...), \\ &= logit^{-1}(X_i \beta) \end{aligned} \tag{2.3}$$

where X is a matrix of predictor variables ($x^1, x^2 ...$), β is a vector of model coefficients, and $X\beta$ is the linear combination of model coefficients and data inputs, referred to as the linear predictor. The linear predictor can be mapped to predicted probabilities (ranging from 0 to 1) through the inverse logit function. Figure 2.6 illustrates how the linear predictor maps to predicted probabilities in a simulated example.

In addition to the logistic model, I also specified multilevel logistic regression models which are useful when data are grouped together in some meaningful way such as votes cast by judges. Multilevel modeling is a powerful tool for estimating group-level variation and these models may include a group indicator and, or variables whose effects vary by group. A simple multilevel model containing a group indicator is often referred to as a varying-intercept model. The varying intercept model can be written:

$$\begin{aligned} Pr(y_i = 1) &= logit^{-1}(\alpha_{j[i]} + \beta^1 x_i^1 + \beta^2 x_i^2 ...), \\ &= logit^{-1}(\alpha_{j[i]} + X_i \beta) \end{aligned} \tag{2.4}$$

where α is allowed to vary by j groups. I estimated a varying intercept model for individual justice votes including a group-level indicator for individual justices.

Estimating Counterfactuals

Using either equation 2.1 or 2.2, estimating the causal effects of crisis requires two quantities for comparison: outcomes of cases or votes both during crisis and non-crisis periods and corresponding counterfactual estimates. There are a number of ways to obtain these unobserved counterfactual estimates. Since logistic regression models are inherently interactive, the predicted probability at any given point along the logistic curve is dependent on the values of all the independent variables. For example, looking at Figure 2.6, there may be an infinite combination of values on the independent variables that would produce a shift in a predicted probability from point A to point B. The difficulty then is in isolating the independent effect of the variable of interest from the effects of other independent variables.

Common practice in political science involves setting all model inputs at some constant value such as their mean or modal values and varying the value on the variable of interest from its minimum to maximum value. The researcher then calculates predicted

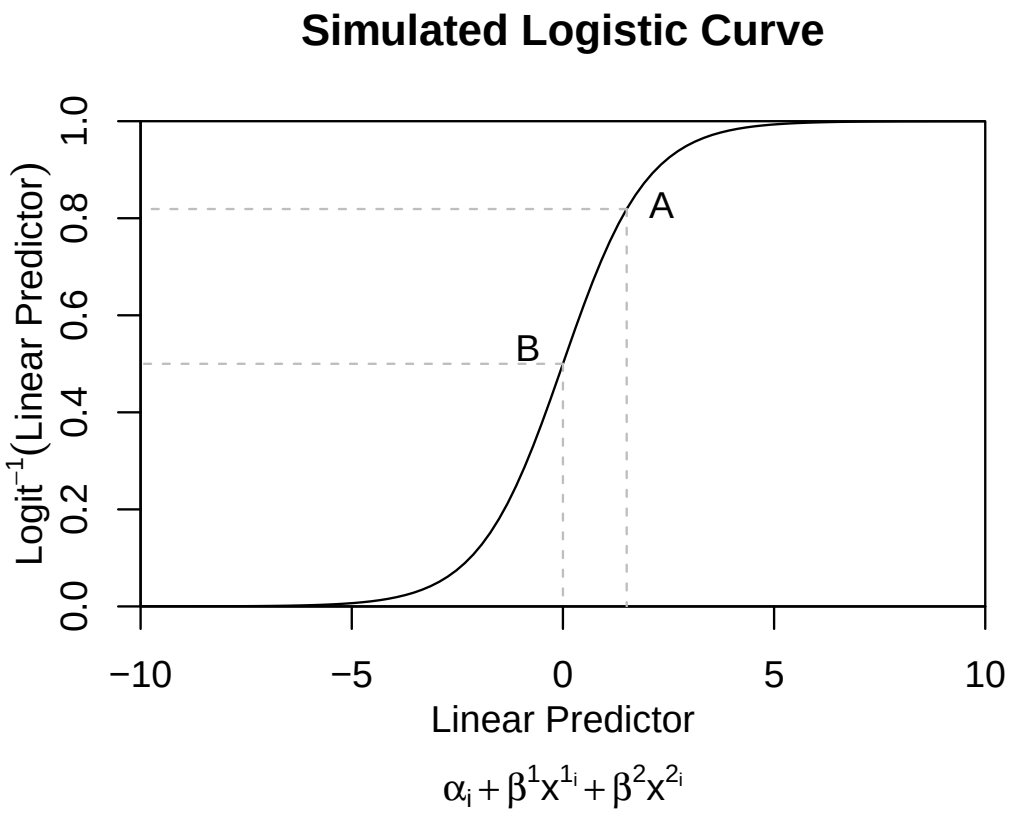

Figure 2.6: Mapping of the Linear Predictor to the Probability Scale Using Simulated Data

probabilities for each unique value of the variable of interest. This approach can be used to estimate the effect of crisis by first running a model, setting the values of all model inputs to some constant value — reasonable values such as their mean or modal value — and calculating the predicted probability of a liberal outcome with crisis set to 0 and again, with crisis set to 1. These predicted probabilities can then be plugged into the equations for the ATE and ATT to calculate the effect of crisis in the whole population (ATE) or for those cases decided during crisis (ATT) only.

Alternatively, the average predictive difference can be calculated by holding the data constant and varying the value of crisis to estimate the Y^1 and Y^0. This approach has

some intuitive appeal since the combination of mean or modal values chosen for the control variables may not be realized in the real-world data. So which option should the researcher choose and does this choice really matter? Is it safe to just choose the mean or modal value or should the average predictive difference be used? In fact, the choice is critical for estimating causal effects. If the values chosen by the researcher are not representative of the target populations (control or treated group) the estimate of the causal effect may be misleading.

Consider the situation where treatment cases and control cases differ on one or more of the input variables in some systematic way which also affects the outcome of interest. The mean or modal values used to calculate predicted probabilities may not be representative of treatment or control cases leading to an inaccurate estimate of the causal effect due to *lack of common support* in the data. Specifically, the combination of values chosen for the independent variables may not actually appear in the data, meaning the estimate of the causal effect is not supported empirically. Lack of common support manifests as either imbalance or lack of complete overlap. Figure 2.7 shows lack of common support in four hypothetical sample distributions.

The data are said to be imbalanced when the distributions on one or more independent variables differ between treatment and control cases. In Figure 2.7 A, the two samples have different means, while Figure B shows two samples with identical means but different standard deviations. Figures C and D show imbalance as well as *lack of overlap*. Lack of overlap refers to the situation when there are regions in the space of one or more independent variables where there are treated cases but no controls, or control cases but no treated ones. Figure C depicts partial overlap of observations. In this sample there are some control and treatment cases that have the identical values on the independent variable depicted by the shaded region. In Figure D however, there is no overlap between control and treatment cases. Lack of complete overlap is a problem for causal inferences

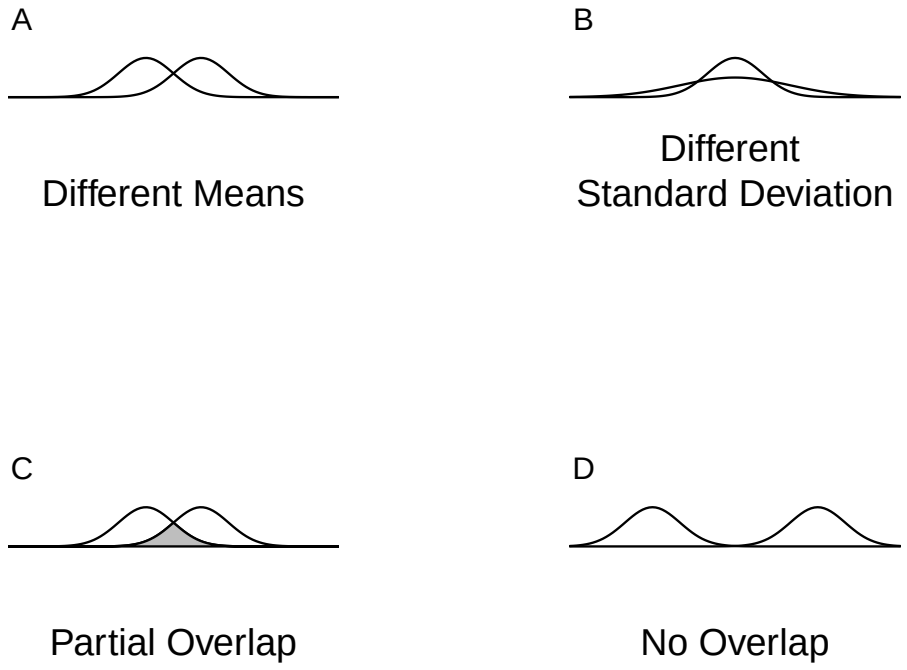

Figure 2.7: Imbalance and lack of overlap in the independent variables present problems for estimating causal effects using traditional techniques for evaluating predicted probabilities.

since calculating counterfactual outcomes requires making assumptions beyond the support of the data. Estimates of causal effects from data falling outside the shaded region in either Figure C or D would be suspect.

Results from statistical models can be biased as a result of imbalance, lack of overlap, and lurking or omitted variables too. The researcher may report a statistically significant result when none exists (type I error) or fail to reject the null hypothesis (type II error) when the treatment in fact does exhibit a statistically significant effect. As King and Zeng (King & Zeng 2007) demonstrate, some analyses are more model dependent, that

is, substantive conclusions may be dependent on the researcher's choice of statistical modeling techniques. Therefore researchers must either test the extent to which modeling choices impact their results, resolving issues of imbalance and lack of complete overlap for instance, or find methods that reduce the impact of modeling assumptions. Matching estimators are growing in popularity as an alternative for estimating causal effects (Ho et al. 2007, Morgan & Winship 2007). Case matching procedures offer an attractive solution to lack of common support while reducing the effect of modeling choices on counterfactual estimates (Ho et al. 2007).

Case Matching

Matching cases should have some intuitive appeal for judicial scholars.[23] Judges and lawyers shepardize cases when preparing legal arguments and opinions in order to find cases that have some relevance to a present case or legal question. This process can be thought of as a manual form of case matching. Matching has two primary purposes outlined in the methodological literature. Matching can be used to develop quasi-experiments allowing researchers to estimate the causal effects of treatment. Matching can also be used to adjust for the assignment of treatment in observational studies when the researcher has no control over treatment assignment and it is feared that confounding variables are related to both the treatment and outcome (Morgan & Winship 2007).

The motivation for using matching procedures to estimate the effect of crisis on Supreme Court decision making falls more in line with the latter approach. Crisis, as a treatment, cannot be randomly assigned to cases. Cases were either decided prior to the 9/11 crisis or after. And changes in the Court's agenda, judicial ideology, legal content

[23] Boyd, Epstein & Martin (2010) recently employed semi-parametric matching and counterfactual methods to the problem of gender and judging. The authors conclude that men are 10 points less likely to rule in favor of a party alleging sex discrimination. However, the authors confirm a panel effect: male judges who serve with female judges are more likely to rule in favor of the party claiming discrimination.

of cases, case salience, and lower court treatment may all have been affected by crisis which could lead to spurious conclusions regarding the causal effect of crisis on judicial outcomes. The goal of matching then, is to balance the data with respect to these confounding variables so that any remaining differences in case outcomes is attributable to crisis and not differences in agenda, ideology, etc.

Matching algorithms are designed to find a set of control observations that match as closely as possible to a set of treatment observations, with a goal of reducing imbalance and lack of overlap in the confounding (independent) variables. Matching can be conducted over a complete dataset or the data may be subdivided to achieve greater balance within subclasses. The resulting matched dataset can then be used to calculate an estimate of a causal effect and this estimate will be less dependent on statistical modeling choice and specific modeling assumptions. There are numerous matching procedures available, ranging from simple exact matching to more complex genetic algorithms (Diamond & Sekhon 2010).[24] The simplest form of matching is one-to-one exact matching, where one control observation is exactly matched on all confounding variables to one treatment observation. But, since it is often difficult to find exact matches in observational data, alternative matching procedures have been developed to find close matches.

Close matches can be defined in a number of ways. For example, propensity scores offer a one-number summary of confounding variables that can be used to find close matches. The propensity score for a two-level treatment variable[25] is defined as the conditional probability of treatment given a set of confounding variables and the model may be written:

$$Pr(T = 1 \mid X = x). \tag{2.5}$$

[24]For a comprehensive overview of various matching techniques see Ho, Imai, King & Stuart (2009).

[25]For two-level treatment variables, the two levels are treatment and no treatment. It is possible to specify models where there may be more levels of treatment, but these examples are increasingly complex and unnecessary for the present discussion.

Alternatively distance measures such as the Mahalanobis distance measure (Cochran & Rubin 1973) provide information about the distribution of multivariate data and can be used to determine close matches. In some cases, there are more control than treatment observations, or vice versa. In these cases many-to-one or matching with replacement may improve the balance of close matched data. When replacement is allowed the matching procedure will produce a set of weights that provide information about how many control observations were matched to each treatment observation. Currently there are five packages developed for the R programming language to implement various matching procedures. The *Matching* package (Sekhon 2011) is currently the most comprehensive package available, offering the widest range of matching procedures along with various tools to analyze matching solutions.

Matching begins much as any other analysis. The researcher identifies a key variable of interest — the treatment, and relevant control variables. Since the outcome of interest need not be included in the matching procedure, matching, unlike scientific hypothesis testing, may be conducting iteratively until a matching solution is found that leads to the best overall matched dataset. Multiple procedures may be used during the matching process and the matching procedure producing the best matched output should be used for further analysis. Preprocessing the data in this way will reduce or possibly even eliminate the effects of the control variables leaving any differences in the outcome of interest attributable to treatment. I report two estimates of the effect of crisis from the matched dataset. The first result, labeled *Matching Estimate*, is the simple difference in the outcome of interest between the treated group and control group. Since no matching procedure resulted in a perfectly balanced matched dataset, I also report the effect of crisis through counterfactual analysis conducted on the matched dataset. In this way, matching can be thought of as a preprocessing step conducted prior to analysis.

2.3 Empirical Analysis: The Effect of Crisis on Supreme Court Outcomes

2.3.1 Traditional Statistical Approach

I began an empirical investigation into the effects of crisis on the U.S. Supreme Court by fitting a logit model and estimating the substantive impact of crisis on civil liberties outcomes. Table 2.5 presents results from three logit models. The first model included all civil liberties cases, and criminal appeals cases. The second model included non-criminal civil liberties cases and the third model was specified only over criminal appeals cases. The crisis variable did not attain conventional statistical significance in any of the models, suggesting the substantive effect of crisis may be small or very close to 0 given this particular modeling strategy.

Coefficients from logistic models are not easy to interpret on their own and since my primary concern was with the substantive impact of crisis, I estimated predicted probabilities of a liberal outcome following regression. Specifically, I needed two estimated probabilities for each case: the probability of a liberal decision given no crisis and the probability of a liberal decision given crisis. I defined the predictive difference between these predicted probabilities as:

$$\begin{aligned} \text{Predictive Difference} &= \delta(\text{Crisis}^1, \text{Crisis}^0, v, \beta), \\ &= \Pr(y = 1|\text{Crisis}^1, v, \beta) - \Pr(y = 1|\text{Crisis}^0, v, \beta), \end{aligned} \tag{2.6}$$

where *Crisis* is the primary variable of interest, v is a matrix of all other input variables, and β is a vector of estimated model parameters. The average treatment effect resulting

Table 2.5: Logistic Regression of Liberal Outcomes in Civil Liberties Cases

	All Cases	Civil Liberties	Criminal Appeals Cases
Intercept	1.6065	2.4796*	-1.0281
	(0.9020)	(1.1936)	(1.7552)
Crisis	-0.2085	-0.6516	0.1578
	(0.5903)	(0.7710)	(0.9874)
Lower Court Disposition Direction	-1.4280***	-1.2519***	-2.1400***
	(0.2125)	(0.2890)	(0.3744)
Lower Court Disagreement	0.3267	0.3608	0.2336
	(0.2164)	(0.2871)	(0.3555)
Salience	1.1780***	0.8676**	1.3243*
	(0.2688)	(0.3187)	(0.5655)
Government is a Party	-0.3678	-0.2270	1.6915
	(0.2924)	(0.3357)	(1.1188)
Median Ideology	-1.1353	-1.8558	-0.7208
	(1.2402)	(1.6572)	(2.0341)
Number of Issues Present	-0.3693	-0.5147**	-0.1904
	(0.1514)	(0.1804)	(0.3757)

***$pr < 0.0001$, **$pr < 0.001$, *$pr < 0.01$
Estimates with standard errors presented in parentheses.

from these predictive differences may be written:

$$ATE = \frac{1}{n}\sum_{i=1}^{n} \delta(\text{Lower Court}_i, \text{Ideology}_i, \text{Salience}_i). \tag{2.7}$$

In addition to this traditional estimate of the effect of crisis, I also calculated a counterfactual estimate by taking the difference between the observed outcomes and estimated counterfactual outcomes. I estimated the counterfactual outcomes for non-crisis cases by running the model over crisis cases and, using the resulting coefficients, predicting counterfactual outcomes for non-crisis cases. Counterfactual estimates for crisis cases were predicted by running the model over non-crisis cases and predicting outcomes for the

crisis cases.[26] This modeling strategy makes use of the known state of the world prior to crisis — the model developed over non-crisis cases — to predict counterfactual estimates for the crisis cases, and vice versa. Returning to the notation in equation 2.1, the values used to estimate the effect of crisis via counterfactual analysis are,

$$\begin{aligned} Y^1 &= (\text{Counterfactual}_{[crisis=0]}, \text{Observed}_{[crisis=1]}) \\ Y^0 &= (\text{Observed}_{[crisis=0]}, \text{Counterfactual}_{[crisis=1]}) \end{aligned} \tag{2.8}$$

The traditional estimates and counterfactual estimates were also subset to calculate the Average Treatment Effect on the Treated (ATT) for the 2001-2004 terms. The results are summarized in Figure 2.8. According to the traditional estimate, crisis decreased liberal outcomes over all cases by about 4.4%. The counterfactual estimate was a bit more conservative at about -3%. The ATT estimated through predictive difference appears to be consistent over the entire period, but the counterfactual estimate suggests outcomes were returning to pre-crisis levels by the 2004 term.

The next two figures suggest different patterns when the cases are subset by criminal versus non-criminal issues. Both traditional and counterfactual estimates suggest crisis decreased the probability of liberal outcomes in civil liberties cases by around 13%. And this effect appears to hold true for the entire period. Estimates of the effect of crisis in criminal appeals cases tell a different story though. The point estimates here suggest that crisis *increased* the probability of liberal outcomes in criminal appeals cases.

It is interesting to note that when all cases were combined, the effect of crisis was only slightly negative. But splitting the cases by issue area, criminal appeals versus non-criminal civil liberties cases, suggests that the two issue areas were affected differently by crisis. Civil liberties outcomes shifted in the conservative direction but criminal appeals

[26]This strategy is described in the documentation for the Matchit package (Ho et al. 2009, 17) and is consistent with treating counterfactual estimates as missing data to be estimated.

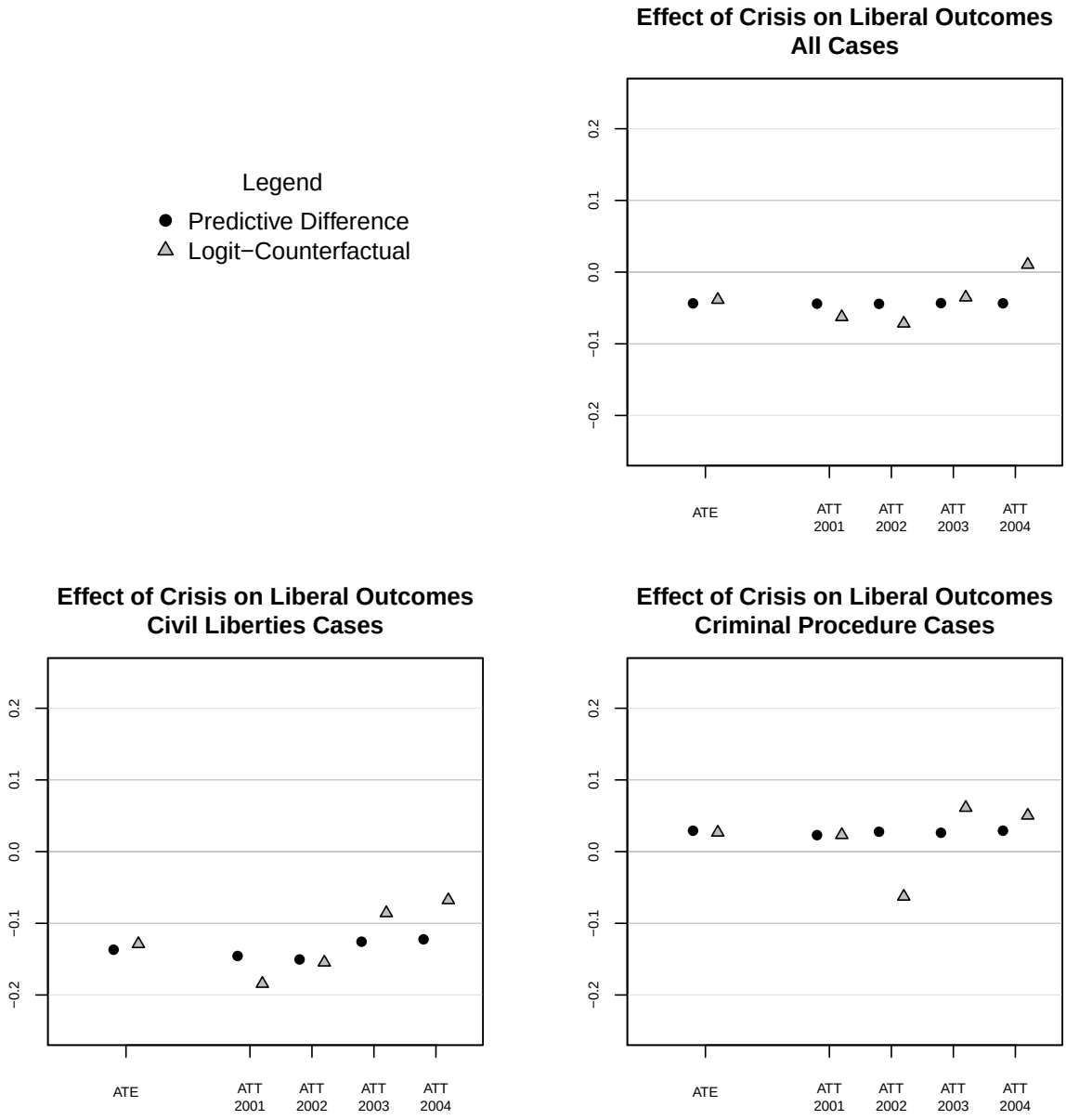

Figure 2.8: Estimated Effects of Crisis on Cases Outcomes via Logistic Regression

case outcomes remained close to pre-crisis levels or possibly shifted slightly in the liberal direction.

Are these effects in line with the crisis thesis? Do they confirm the hypotheses set out in section 2.2? Are theses effects believable? The effect of crisis on civil liberties cases seems to

support the crisis thesis and confirm hypothesis H1. Civil liberties outcomes were, on the whole, more conservative as a result of crisis. Criminal appeals case outcomes however did not conform to the expectation presented in H2. These results at best suggested a very small liberal shift in outcomes due to crisis. These effects were all estimated from the raw data. Predictive comparisons, comparing traditional estimates with crisis set equal to 0 versus estimates with crisis set equal to 1, and counterfactual estimates were used to make causal inferences. But this analysis did not take into account potential systematic differences between non-crisis and crisis cases or whether the predictive inferences were actually supported by the data. If crisis and non-crisis cases differed substantially on the independent variables *and* those differences were the result of crisis, the estimated effects could suffer bias. In the next section, I explore and control for the effects of imbalance[27] and lack of complete overlap through matched case analysis.

2.3.2 Matched Case Analysis

The goal of matching is to reduce imbalance in the data and control for lack of complete overlap as discussed in section 2.2.2. Imbalance may arise when control and treated cases — non-crisis and crisis cases — differ on predictors of both outcomes and crisis. Does the government participate more often in cases decided during crisis? Are crisis cases more complex than non-crisis cases? Are civil liberties cases decided during crisis more likely to be salient? I begin this section by looking at the distribution of values on the independent variables across treated and control cases.

Table 2.6 shows the number of cases with specific characteristics in the treated and control groups. For example, there were 163 non-criminal civil liberties cases decided prior to crisis and 93 that were decided during crisis. The law supplement variable subset

[27]These concepts were introduced in section 2.2.2 and are discussed in the modeling context in the next section.

Table 2.6: Summary of Control Variables by Issue Area

Control Variable	Non-Crisis Cases	Crisis Cases
Issue Area Civil Liberties	163	93
Issue Area Criminal Procedure	140	73
Law Supplement		
First Amendment	32	20
Fourth Amendment	24	12
Fifth Amendment	16	15
Sixth Amendment	8	9
Fourteenth Amendment	33	15
Age Discrimination	13	9
Habeas Corpus	20	19
Federal Rules of Procedure	13	4
Other Legal Provision	61	31
No Legal Provision	83	32
Lower Court Direction		
Liberal Outcome	139	100
Conservative Outcome	164	64
Lower Court Disagreement	95	66
Government a Party	258	144
Government is Petitioner	128	85
Government is Respondent	144	66
Combined Salience	78	42
NYT Salience	63	32
CQ Salience	53	32
1 Legal Provision	231	123
More than 1 Legal Provision	72	42

the data more than any other independent variable and could pose problems for finding appropriate matches in each subcategory. Specific combinations of values on independent variables across treated and control groups may also not be well represented in the dataset. The matching procedure provided more explicit detail on the imbalance in original data and offered information on the amount of imbalance that was reduced through matching.

I evaluated a number of matching procedures including propensity score matching, exact matching solutions, and full, optimal and close neighbor matching. In the end, the ge-

Table 2.7: Balance Statistics Before and After Matching for Combined Cases

	Before Matching		After Matching	
	Mean Treated Mean Control	Std Mean Difference	Mean Treated Mean Control	Std Mean Difference
	Combined Civil Liberties Cases			
Law Supplement	6.1288 6.6865	-17.4291	6.5374 6.4835	1.6929
Lower Court Direction	0.6135 0.4587	31.6822	0.5129 0.5129	0.0000
NYT Salience	0.1902 0.2079	-4.5056	0.1931 0.2017	-2.1721
Government is a Party	0.8712 0.8515	5.8564	0.8584 0.8584	0.0000
Number of Issues	1.3129 1.3564	-7.0950	1.3240 1.3358	-1.7729
	Non-Criminal Civil Liberties Cases			
Law Supplement	6.1111 6.2761	-4.7380	6.1798 6.2016	-0.6454
Lower Court Direction	0.6556 0.5521	21.6404	0.6087 0.5929	3.2331
NYT Salience	0.2333 0.3129	-18.7035	0.2846 0.2846	0.0000
Government is a Party	0.7778 0.7546	5.5437	0.7628 0.7628	0.0000
Number of Issues	1.4111 1.5153	-15.5880	1.3874 1.4493	-8.8620
	Criminal Appeals Cases			
Law Supplement	6.1507 7.1643	-35.7327	6.8310 6.8310	0.0000
Lower Court Direction	0.5616 0.3500	42.3610	0.4366 0.4366	0.0000
NYT Salience	0.1370 0.0857	14.8094	0.1033 0.1033	0.0000
Government is a Party	0.9863 0.9643	18.8102	0.9718 0.9718	0.0000
Number of Issues	1.1918 1.1714	3.9294	1.1455 1.1408	1.1640

netic matching algorithm (Diamond & Sekhon 2010, Mebane & Sekhon 2011, Sekhon 2011) found in the *Matching* package[28] provided the best overall balance on the independent variables.[29] Matching was conducted with replacement, meaning that multiple control cases could be matched to each treated case and cases could be reused to achieve the best overall balance. This is a common approach and the resulting matched dataset includes a set of sampling weights based on how many times a particular case was included in the matched dataset.

Table 2.7 shows sample means on the independent variables for the treated and control groups (crisis and pre-crisis) over combined cases and subset by criminal appeals and civil liberties cases. The mean values reported are not of particular interest. The primary results of interest in this table are reported in the last column, the standardized difference between treated and control groups for each variable. Perfect balance between treated and control groups for a particular variable results in a value of 0 in this column. Any number greater than 0 indicates that some imbalance remained in the matched dataset. So for instance, *lower court direction* was perfectly balanced in the matched dataset for combined cases and balance was improved for the *number of issues* variable in civil liberties cases, but some imbalance remained.

Following the matching procedure, I estimated the average treatment effect (ATE) and the conditional average treatment effect on the treated (ATT) over all cases and subset for non-criminal civil liberties cases and criminal appeals cases. Two sets of estimates for the ATE and ATT are reported in Figure 2.9. The first estimate, labeled *Matching Estimate* is a simple difference in observed outcomes between the control and treated cases in the matched dataset. The second estimate, labeled *Counterfactual Estimate* was calculated by

[28]The Matching package for the R programming language is authored and maintained by Jasjeet Singh Sekhon and is available at http://cran.r-project.org/web/packages/Matching/index.html.

[29]Other matching solutions evaluated during the course of this project produced results that were consistent with the results presented here.

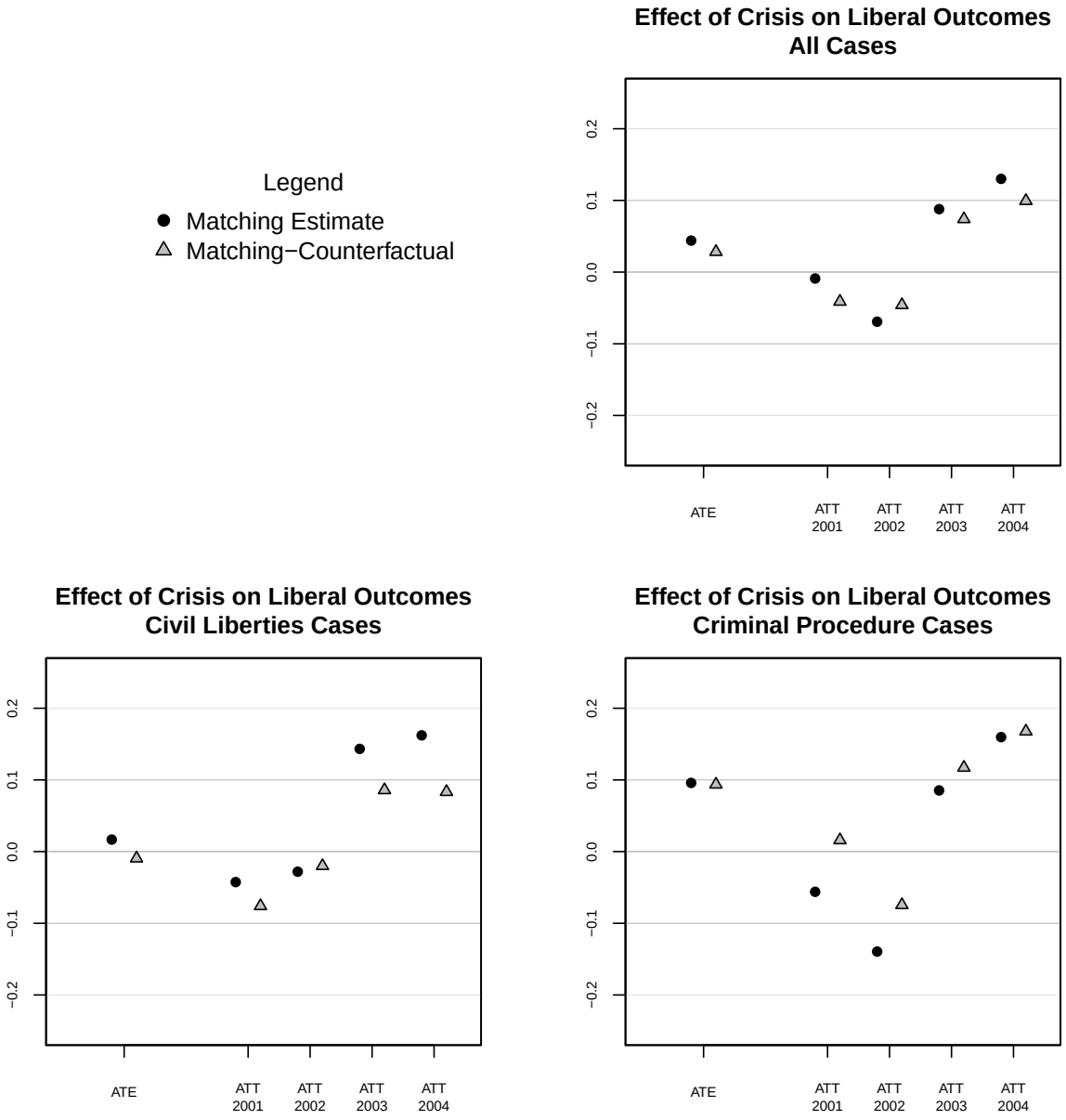

Figure 2.9: Estimated Effect of Crisis on Case Outcomes via Matching

the same counterfactual estimation procedures as outlined in the previous section. The average treatment effect estimated over all cases suggests that crisis actually increased liberal outcomes by about 3%, but remember that the ATE is an effect calculated over all cases — suggesting that crisis impacted non-crisis cases as well. The average treatment

effect on the treated gives the effect of crisis for crisis cases. The overall picture for combined cases suggests that crisis had a short-lived impact, decreasing liberal outcomes early on, but case outcomes actually became more liberal than would be expected during the 2003 and 2004 terms. Liberal outcomes *decreased* by 7% in 2002 according to the matching estimate. The counterfactual estimate was slightly more conservative for this term, placing the effect at about -4.5%. By 2003, liberal outcomes *increased* by close to 10%. The pattern is somewhat different in non-criminal civil liberties cases. Both the matching estimate and counterfactual estimate suggest that outcomes were slightly more conservative in 2001, returned to anticipated levels in 2002, and finally became more liberal in the 2003 and 2004 terms. Criminal appeals cases appeared to be affected more dramatically though with the lowest ebb in liberal outcomes appearing in the 2002 term.

2.4 The Effect of Crisis on the Votes of Individual Justices

2.4.1 Traditional Statistical Approaches

The U.S. Supreme Court is not a monolithic entity. Case outcomes are the result of individual decision makers who may or may not be affected equally by crisis. In this section I present analysis of the causal effects of crisis on decision making of individual judges of the Supreme Court. The cases used in this analysis were identical to the cases presented in the previous section and similar methodologies for calculating results was employed. The primary difference was the unit of analysis and model choice. For this analysis, the dependent variable was the justice vote and linear mixed effects models, as discussed in section 2.2.2 were used rather than individual logit models.[30] Table 2.8 reports results from three linear mixed effects models of justice votes over all cases, non-

[30]Individual logit models produced nearly identical substantive results to the results from linear mixed effects models reported in this section.

criminal civil liberties cases, and criminal appeals cases. I included a random term to allow the effect of crisis to vary by justice.

Table 2.8: Linear Mixed Effects Model of Liberal Justice Votes in Civil Liberties Cases

	All Cases	Civil Liberties	Criminal Appeals Cases
Intercept	0.4601	1.0839**	-2.1791***
	(0.2758)	(0.3369)	(0.4834)
Lower Court Disposition Direction	-1.1506***	-1.2679***	-1.3600***
	(0.0726)	(0.1020)	(0.1152)
Lower Court Disagreement	0.1079	0.0582	0.1135
	(0.0744)	(0.0995)	(0.1164)
Salience	0.6927***	0.5234***	0.6615***
	(0.0903)	(0.1091)	(0.1750)
Government is a Party	-0.1964	-0.1492	2.1338***
	(0.1016)	(0.1179)	(0.4100)
Number of Issues Present	-0.1674***	-0.2551***	-0.0911
	(0.0488)	(0.0573)	(0.1167)
	Crisis	Crisis	Crisis
Kennedy	-0.0426	-0.0030	-0.0906
Scalia	-0.1351	-0.0092	-0.1885
Thomas	-0.1564	-0.0097	-0.2625
Souter	0.1855	0.0084	0.4040
Stevens	0.2324	0.0089	0.5733
Ginsburg	0.1815	0.0072	0.4364
O'Connor	-0.0142	-0.0012	-0.0515
Breyer	0.1263	0.0049	0.2997
Rehnquist	-0.1172	-0.0066	-0.2552
Variance	0.7530	0.8587	0.7389

***$pr < 0.0001$, **$pr < 0.001$, *$pr < 0.01$
Estimates with standard errors presented in parentheses.

The substantive effects estimated from these models are shown in Figures 2.10, 2.11, and 2.12. As in the analysis of case outcomes, two sets of estimates were calculated. Traditional estimates were calculated through predictive difference and counterfactual estimates were calculated by the same counterfactual analysis procedures outlined in the

previous section. The first thing to note from these figures is that the traditional estimates do not move much over time (ATT). The estimates may exhibit a small rise or decline by 1-2% over the four terms, but these estimates are essentially static within judges. The counterfactual estimates do vary over time by judge, suggesting some patterns of the effects of crisis. In Figure 2.10 for example, the counterfactual estimate for Justice Breyer suggests reduced his support of the liberal position by 4% in the 2001 term, but in the 2002 term, his support increased by 6%, eventually returning to pre-crisis levels of support for the liberal position in the following terms. Crisis decreased Justice Kennedy's support of the liberal position down by 5% in the 2001 term, but he subsequently increased support for liberal outcomes in each successive term.

Figure 2.10 suggests that in general, the judges with Segal-Cover scores to the right of Justice Souter increase conservative voting and judges to the left of Souter increase liberal voting. According to hypothesis H3a, crisis should increase conservative voting by all justices in civil liberties cases, and criminal appeals cases, but this is not the case. Hypothesis H3b is not supported in these results either. When taking relative ideological placement of the judges into account, the two most liberal judges, Ginsburg and Breyer, increased support for the liberal position and Rehnquist and Scalia, the two most conservative judges, voted more conservatively in the 2001 term. This suggests crisis may have reinforced ideological divisions rather than moving all judges in the conservative direction.

The counterfactual results in Figure 2.11 for non-criminal civil liberties cases are more in line with H3a. In all but one judge, the 2001 term saw decreases in support for the liberal position. The common trend following 2001 was a return to pre-crisis levels of voting for the liberal outcome followed by increased liberal voting. These counterfactual results were the less 'stable' in that there were larger effects sizes between terms and the overall patterns for some judges did not follow a linear trend that one might expect.

The traditional estimates for the effect of crisis in non-criminal civil liberties cases was essentially 0.

By far, the largest effects of crisis on individual judge's voting were estimated for criminal appeals cases. Again, the traditional estimates of the ATT remained essentially unchanged over time within judges, but there was variation between judges. Breyer, Ginsburg, Souter, and Stevens showed increased support for liberal outcomes while Kennedy and O'Connor showed no effect of crisis on voting patterns, and Rehnquist, Scalia, and Thomas increased conservative voting behavior. These results offer more evidence that the 9/11 crisis reinforced the ideological divide on the Court rather than decreasing support for civil liberties wholesale. The counterfactual estimates also show some interesting patterns. Justices Breyer, Ginsburg, and Kennedy exhibit an inverted 'U' shape in their estimated effects. This indicates that over the four-term period, their support for liberal outcomes in criminal appeals cases first *increased*, then decreased. In the case of Justices Breyer and Kennedy, support for liberal outcomes actually fell below 0 in the 2004 term.

2.4.2 Matched Case Analysis

In this section, I present results from matched case analysis of individual judge's support for liberal outcomes in civil liberties and criminal appeals cases. As in the previous matched case analysis, the genetic matching algorithm found in the *Matching* package for R provided the best overall matching solutions. The substantive effects for all cases, non-criminal civil liberties cases and criminal appeals cases are shown in Figures 2.13, 2.14, and 2.15. As in the matched case analysis presented in section 2.3.2, two sets of estimates are given: a matching estimate and counterfactual estimate. Remember that the matching estimates are simple comparisons of pre-crisis outcomes —justice votes in this case — and crisis outcomes. The counterfactual estimates were produced by rerunning the same models as presented in Table 2.8 on the matched data to obtain counterfactual

predicted probabilities of a liberal vote and comparing these probabilities to the observed votes of the judges.

The first contrast to be made between these results and the results obtained from models of the raw data in the previous section is that there is movement over time for both the matching estimates and the counterfactual estimates. On the whole, these results tend to support the hypothesis that crisis did in fact decrease support for civil liberties. In Figure 2.13, seven judges show a decrease in support for the liberal outcome in either the 2001 or 2002 term of the Court. Conservative voting increased most dramatically for Justices Rehnquist, Scalia, Stevens, and Thomas. Crisis shifted Justice Rehnquist's voting in the conservative direction by 10% in 2001, according to the more conservative estimate. Justice Thomas shift happened in the 2002 term of the Court. According to the counterfactual estimate, his voting in that term was about 7% more conservative due to crisis. But these effects appears to be short-lived. By the 2003 and 2004 terms, the effects of crisis either disappear (indicated by an estimate of 0) or shift in the liberal direction. The effect of crisis for Justices Ginsburg, O'Connor, and Souter in these terms suggests an increase in support for liberal outcomes by at least 10%.

Estimates of the effect of crisis over non-criminal civil liberties cases are shown in Figure 2.14. Here, it is clear that Justices Scalia and Thomas voted more conservatively during the 2002 term as a result of crisis. Both the matching estimates and counterfactual estimates suggest an effect slightly greater than 20%. Justice Kennedy also appears to have shifted in the conservative direction in 2002 but only by 10%. Justices Ginsburg, O'Connor, and Souter appear to increase support for liberal outcomes by the end of the series and other judges hover around 0.

Support for the liberal position in criminal appeals cases as shown in Figure 2.15 also suggest support for the crisis thesis early on. Justice Ginsburg, Kennedy, O'Connor, Rehnquist, Scalia, and Stevens appeared to shift in the conservative direction in either

the 2001 or 2002 term of the Court. The effect was most pronounced in Justice Kennedy and Justice Rehnquist whose support for liberal outcomes decreased by 20% and 18% respectively. Justice Kennedy's pattern again exhibited an inverted U shape suggesting increasing support for the liberal position in 2002 and 2003, but decreasing support in 2004. Other judges appear to move in the liberal direction over time.

2.5 Conclusions

Are there general conclusions to be drawn from the analyses presented here? Did Crisis shift Supreme Court outcomes, both case outcomes and individual justice votes, in the conservative direction consistent with the crisis thesis? Does crisis affect all judges similarly, or are there distinct patterns among the members of the Court? These questions are fundamentally questions of causality and causality is not an easy relationship to establish. For this reason, I used multiple modeling techniques and latest matching procedures to estimate the effects of crisis. In addition, multiple estimates were presented for each analysis, giving some confidence that the conclusions were grounded by empirical evidence. The picture that emerged was of a relatively short-lived effect of crisis, consistent with the crisis thesis. In many of the analyses, estimates of the effect of crisis suggested a decline in support for the liberal position in either the 2001 or 2002 term. But was followed by a liberal resurgence in the 2003 or 2004 terms.

These results indicate the 9/11 crisis did influence the votes of judges and ultimately case outcomes in the U.S. Supreme Court consistent with previous findings, but the effect of crisis did not persist. For those worried over the long-term effects of crisis on our most basic and cherished liberties, there is little cause for concern. This analysis indicates that in the immediate wake of a national crisis, judges respond by denying civil liberties claimants and ruling against criminal defendants. But, this pattern only persists for a

short time, after which outcomes shift in the liberal direction. In the following section, I explore whether the crisis thesis is a phenomenon limited to the U.S. Court context or whether this theory has explanatory power in foreign high courts as well.

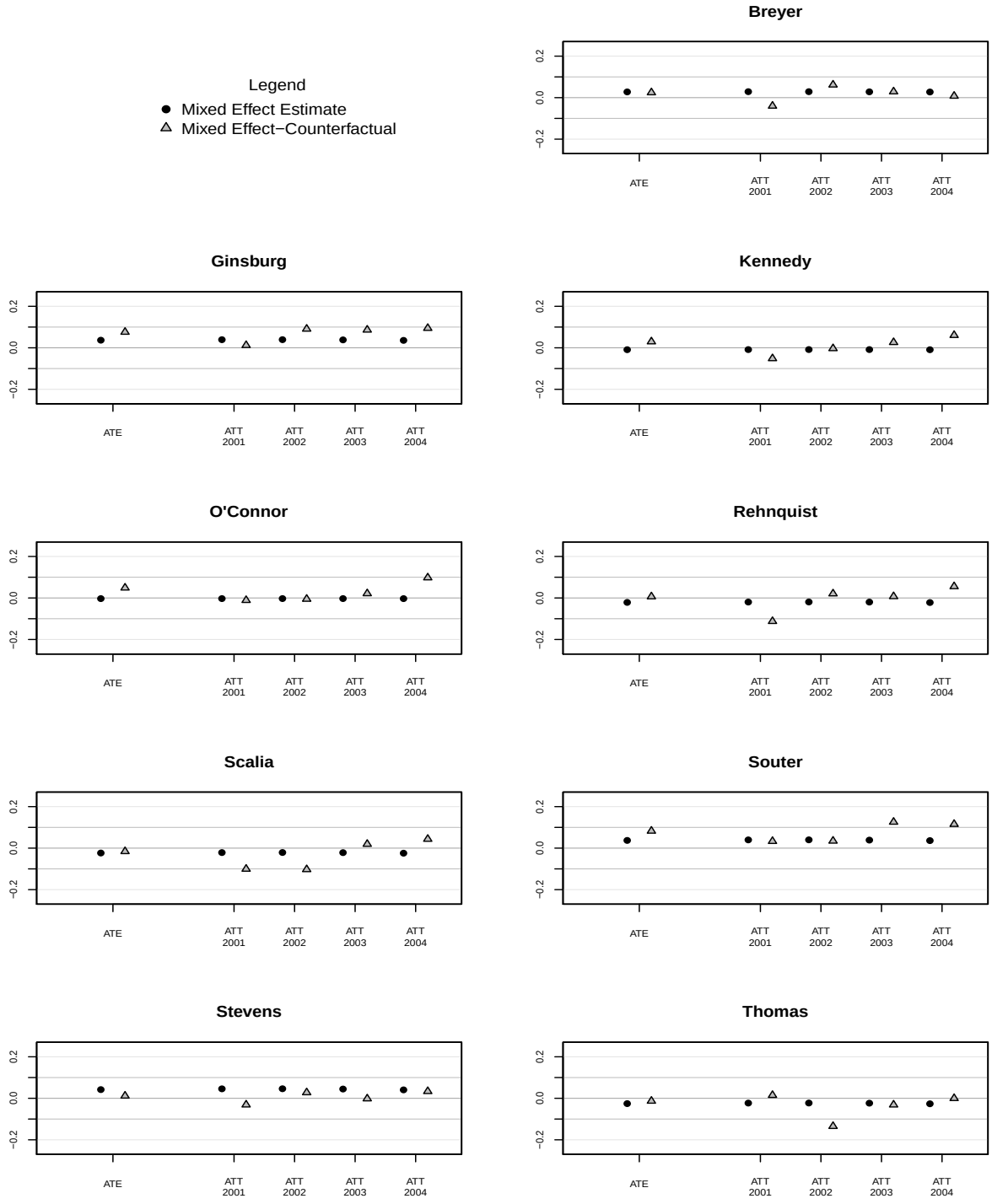

Figure 2.10: Estimated Effect of Crisis on Justice Votes Over All Cases via Linear Mixed Effects Model

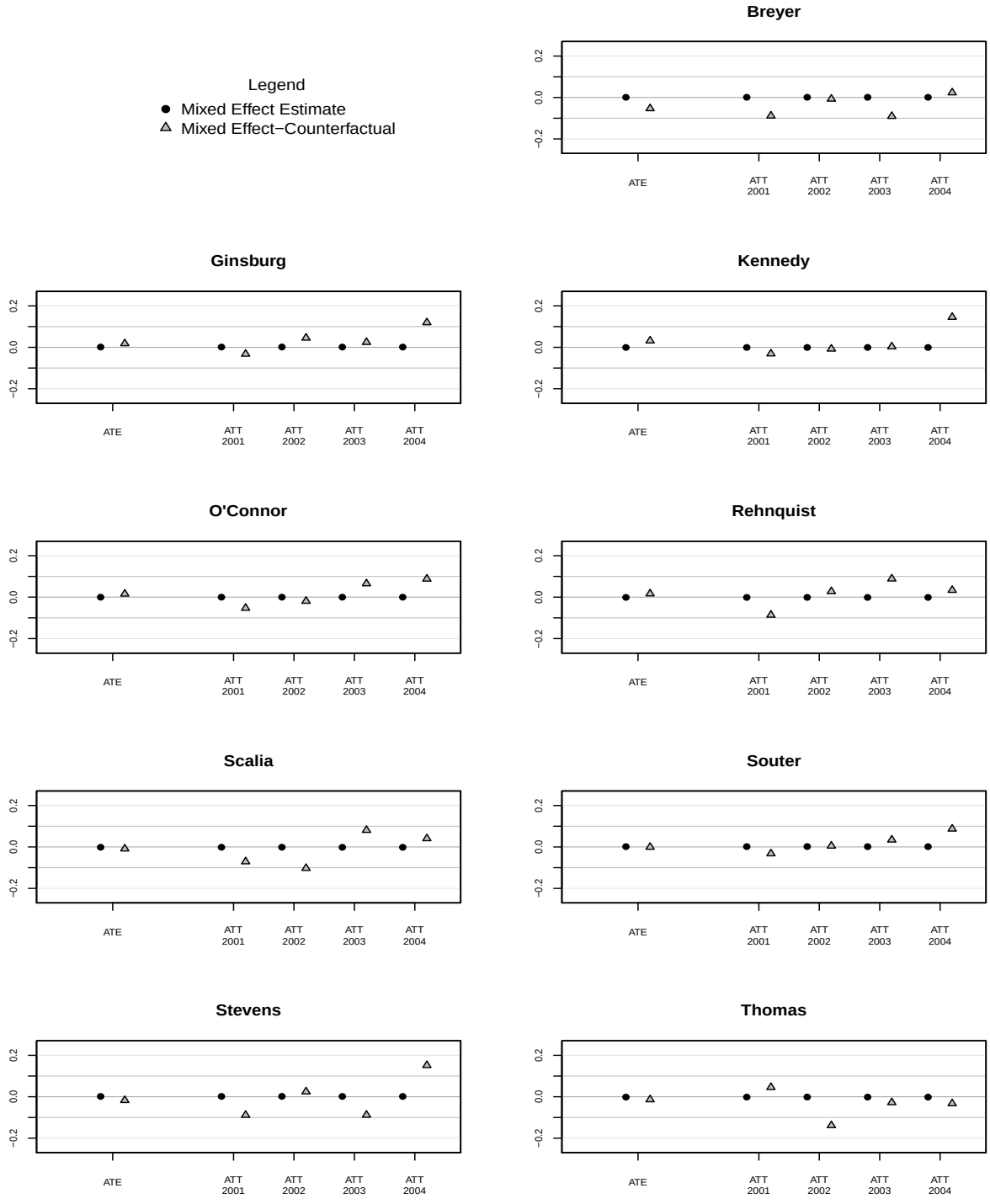

Figure 2.11: Estimated Effect of Crisis on Justice Votes Over Civil Liberties Cases via Linear Mixed Effects Model

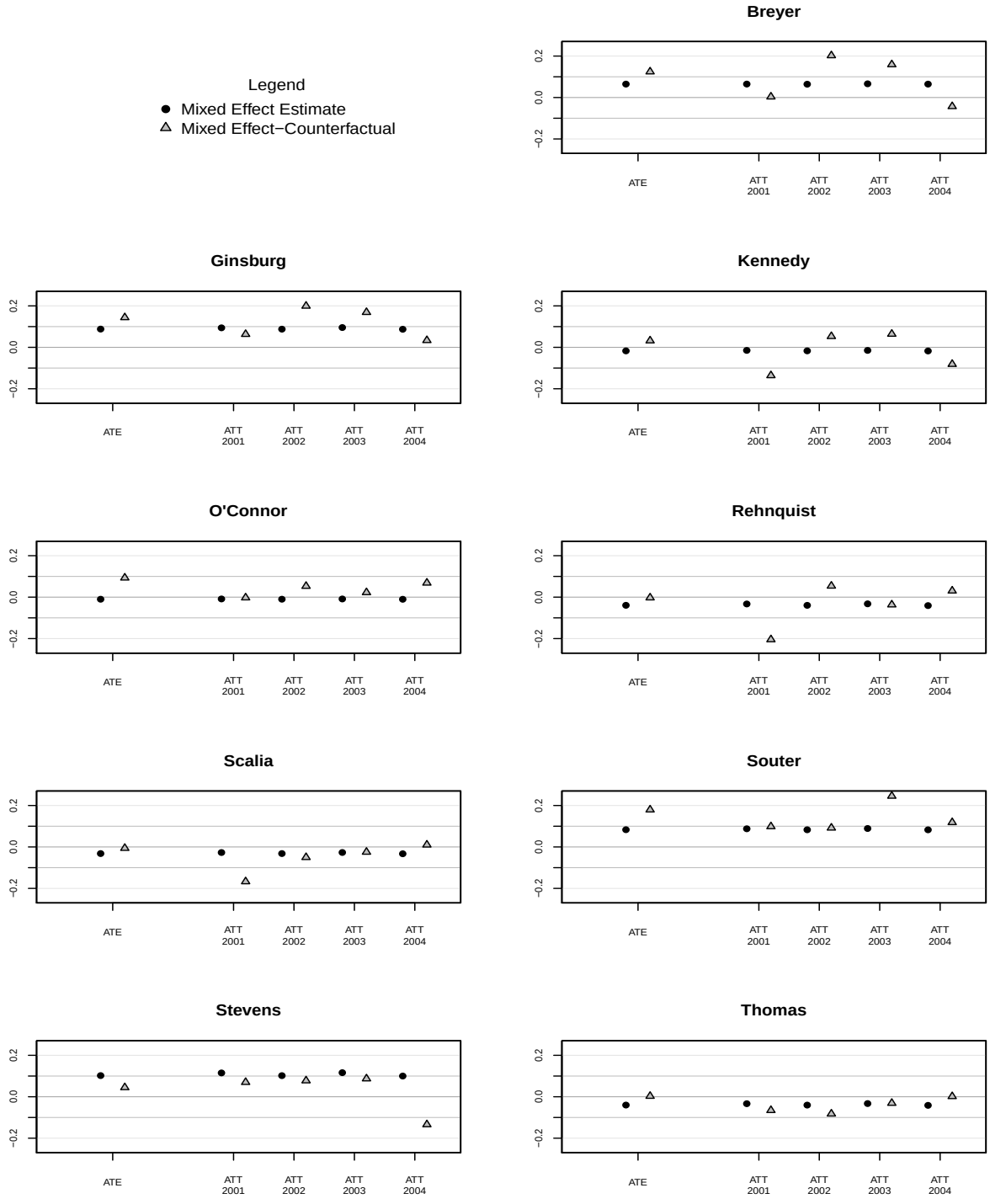

Figure 2.12: Estimated Effect of Crisis on Justice Votes Over Criminal Appeals Cases via Linear Mixed Effects Model

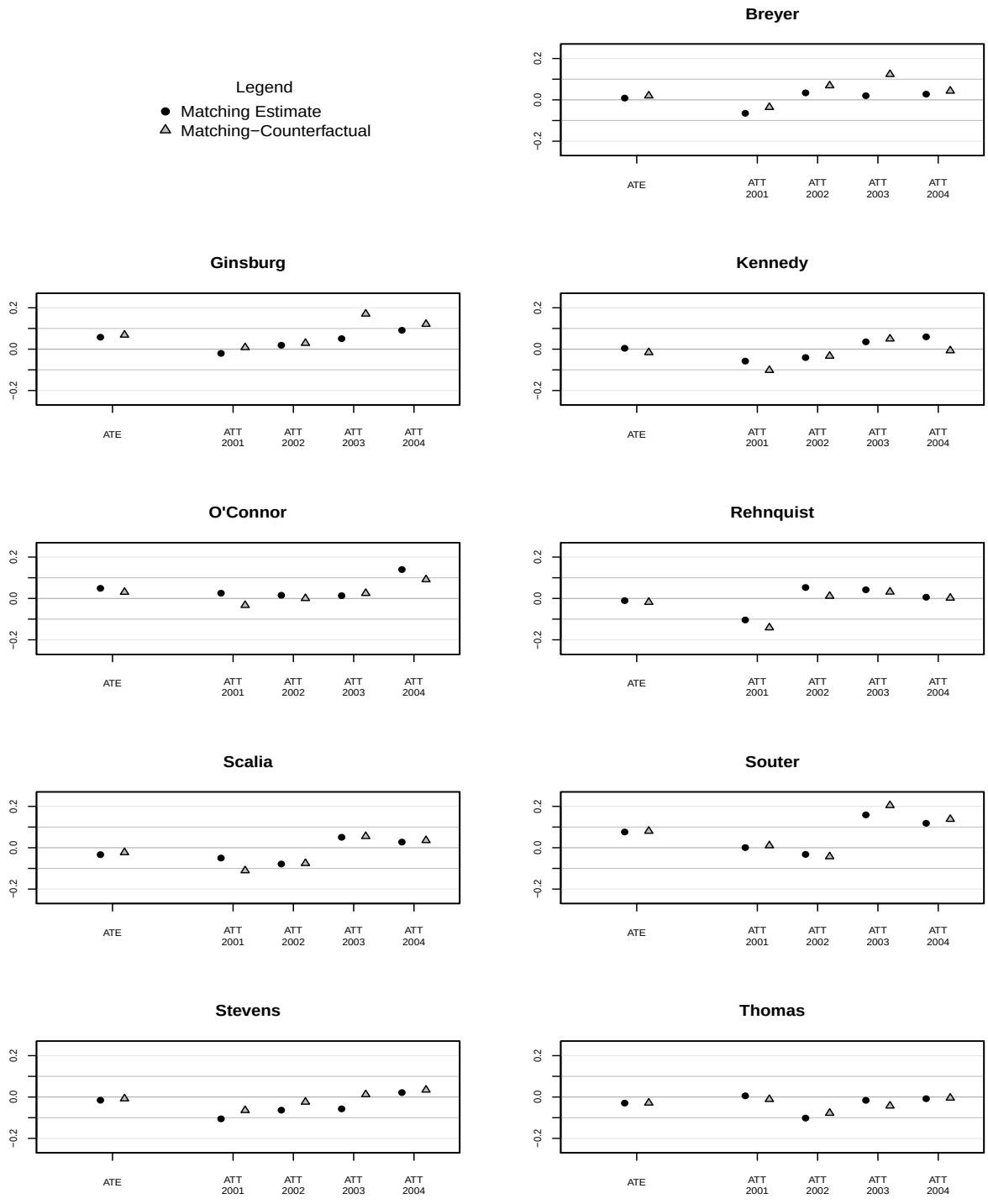

Figure 2.13: Estimated Effect of Crisis on Justice Votes Over All Cases via Matching

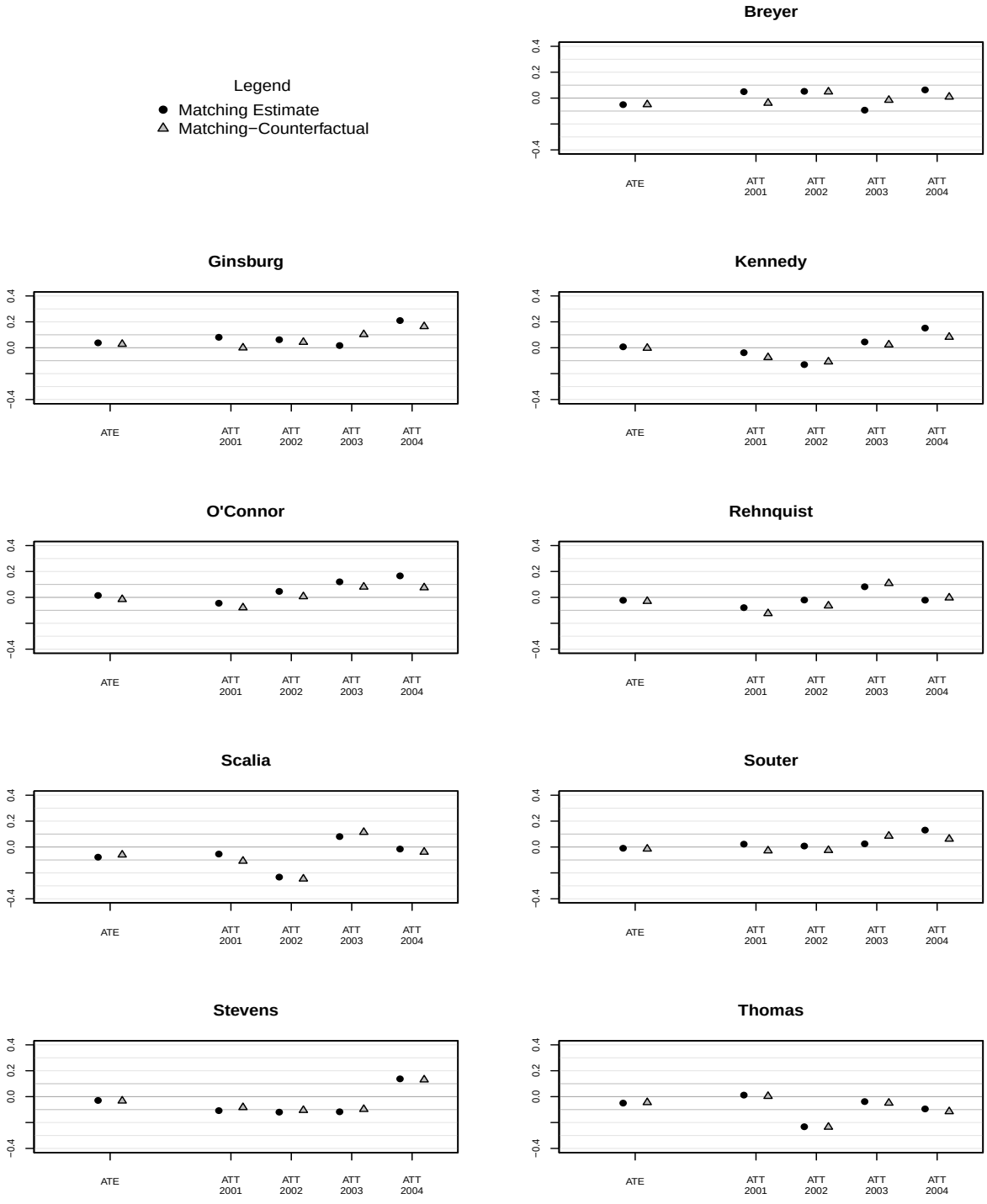

Figure 2.14: Estimated Effect of Crisis on Justice Votes Over Civil Liberties Cases via Matching

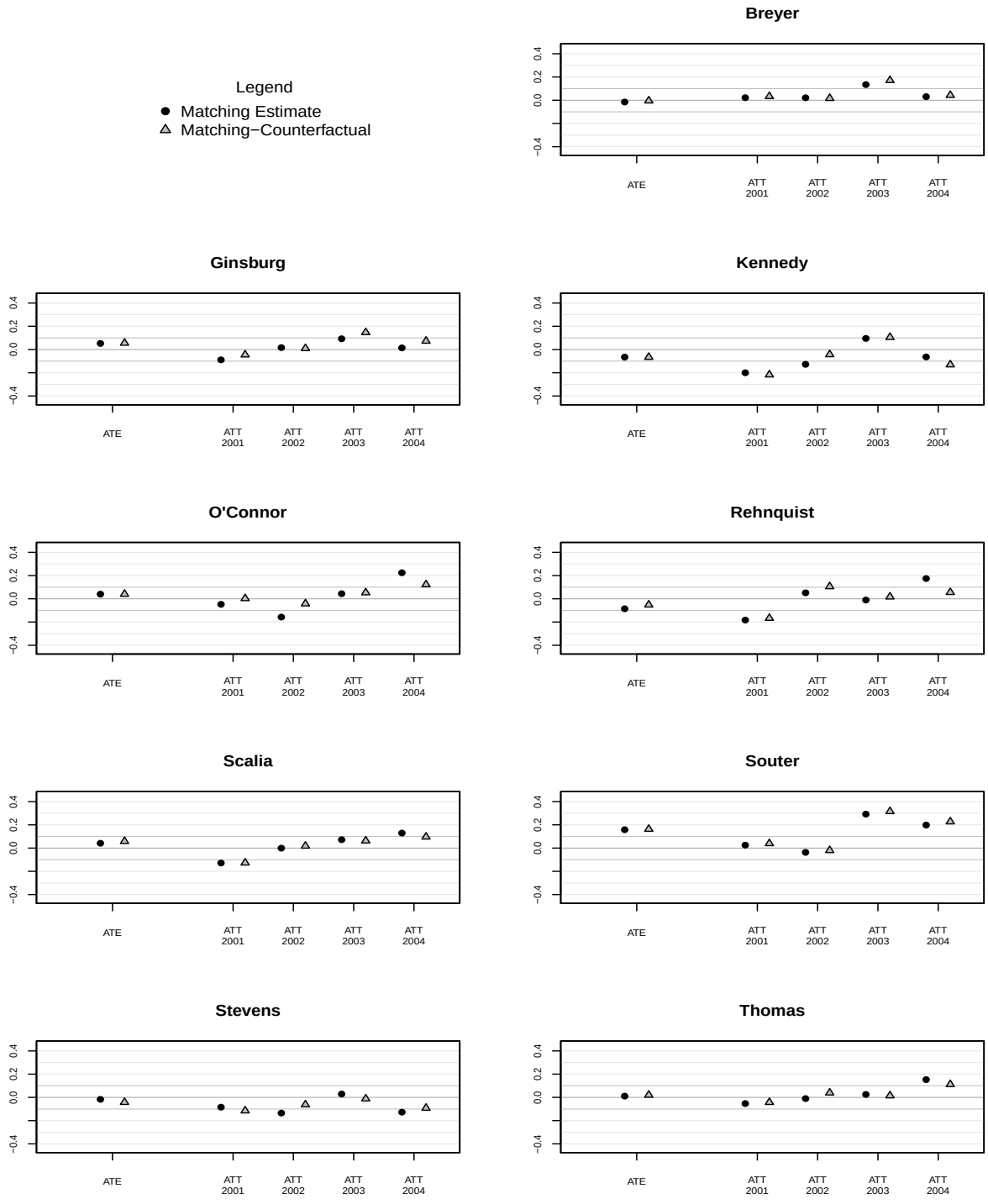

Figure 2.15: Estimated Effect of Crisis on Justice Votes Over Criminal Appeals Cases via Matching

Chapter 3

Crisis and the Supreme Court of India

In Chapter 2, I demonstrated that crisis impacts judicial decision making in the United States Supreme Court in the years following 9/11. The findings were consistent with previous research on the crisis thesis and presented a more nuanced view of the impact of crisis on the Court within a single crisis period. Specifically, I found that crisis decreases outcomes favoring civil liberties claimants and criminal defendants. Additionally, the effect of crisis was non-constant over time. The next logical extension for research was to ask whether the crisis thesis is generalizable beyond the American judicial context. Does crisis affect civil liberties outcomes of other national high courts or is this phenomenon limited to American courts?

To address this question, I began a search for literature on decision making in foreign high courts, paying particular attention to any work on judicial decision making during crisis. C. Neal Tate and Stacia Haynie's work (Tate 1993, Tate & Haynie 1993, Tate 1994) on courts and crisis regimes proved surprisingly on point. Their focus on the judicialization of politics during crisis suggested the Supreme Court of the Philippines and the Indian Supreme Court might provide promising case studies for an empirical analysis of case outcomes during crisis. Both countries experienced political instability between 2000

and 2011. Crisis in the Philippines however, is constant throughout the time period and these crises are best characterized as insurgency and rebellion.[1] India on the other hand, experienced three distinct periods of crisis between 2000 and 2011, directly related to international conflicts with Bangladesh and Pakistan. For this reason, I decided to focus on the Supreme Court of India.

The High Courts Judicial Database (HCJD) (Haynie et al. 2007) appeared to be an appropriate source of data for an analysis of Indian Supreme Court outcomes. However, on closer inspection, I immediately noted several important limitations. First, the dataset covering the Supreme Court of India had not been updated beyond the year 2000. Equally important, the dataset included only 180 civil liberties cases and 855 criminal appeals cases for the entire 30 year period of coverage. Since the Supreme Court of India decides hundreds of cases each year, the architects of this particular database chose to randomly sample 100 cases per year.[2] The resulting dataset contained on average only 34 cases per year. These limitations, combined with some concern I had after reviewing a small selection of case codings led me to conclude that a new dataset should be constructed for this project. I chose to focus on criminal appeals case outcomes between 2000 and 2011. Criminal appeals cases have previously been included in studies of judicial responses to crisis and throughout this project, I treat criminal appeals cases as a subset of civil liberties cases. The focus on criminal appeals cases lessened data collection requirements and allowed for greater quality assurance of the final data set. The resulting dataset included 1,389 unique criminal appeals cases coded from the Supreme Court's online Judgment Information System (JUDIS). Unfortunately, the website does not publish individual judges' votes at this time, but there are plans to expand the coverage on the

[1] Insurgency is an organized opposition with the primary objective of overthrowing the central government. Rebellion is an organized opposition with the primary objective of gaining independence or autonomy from the central government. See operational definitions adopted by the Department of Defense for the Integrated Crisis Early Warning System (ICEWS) (O'Brien 2010).

[2] See the HCJD codebook found at `http://sitemason.vanderbilt.edu/page/exnakE`.

JUDIS website in the near future. With this data in hand, I subjected the crisis thesis to rigorous empirical analyses identical to the tests described in Chapter 2, thus increasing the comparability of the reported results.

This chapter is structured in the following manner. In section one, I discuss the Indian Constitution with particular emphasis on the Fundamental Rights and emergency powers. I then present an overview of the history and structural elements of the Indian judicial system and in particular, the Supreme Court of India. In section 2, I present an overview of previous research on the Court during crisis, building a foundation for the Indian Supreme Court as an appropriate venue for empirical analysis on how crisis might be expected to impact judicial decision making. In section 3, I briefly review the crisis thesis and offer a hypothesis for criminal appeals case outcomes in the Supreme Court of India. I then provide more detailed information on current data sources and discuss my solution for developing a new dataset for the Indian Supreme Court. This discussion is followed by a description of the resulting dataset and a definition, discussion, and operationalization of crisis based on my work for the Department of Defense. In the final section, I present empirical analyses of case outcomes using traditional statistical methods and matched case analysis followed by some concluding remarks.

3.0.1 The Indian Constitution and Fundamental Rights

This brief summary of the Constitution, Fundamental Rights, and emergency powers is intended to familiarize the reader with the various parts of the Constitution and provide a frame a reference for discussions in later sections. The Constitution of India[3] was enacted by the Constituent Assembly on November 26, 1949, and came into effect on January 26, 1950. There are 448 articles written in 22 parts. Three Parts of the Constitution are of

[3]Full text of the Constitution is available complete with amendments at `http://indiacode.nic.in/coiweb/welcome.html`.

particular relevance to the reader. Part III covers Fundamental Rights. Part V is divided into three chapters covering the executive, parliament, and the judiciary. Part XVIII covers various emergency provisions including declaration of an emergency and Article 356, commonly referred to as President's Rule, which effectively places one or more states under the direct control of the president.

The Fundamental Rights, enshrined in the Constitution in Part III, include a range of civil liberties similar to those found in the U.S. Bill of rights. Articles 14-18, titled "Right to Equality", provide for equality under the law; prohibit discrimination based on race, religion, caste, gender, and place of birth; provide equality of opportunity in public employment; abolish non-military / non-academic titles and the practice of "untouchability". Untouchability is the practice of ostracizing and / or discriminating against minority groups. In India, the Dalit people are one example of the "depressed caste" who have historically suffered discrimination under untouchability (Bob 2007, Ram 2004). The Constitution provides additional protections for Scheduled Castes and Scheduled Tribes in Part XVI. Article 19 protects certain civil liberties such as freedom of speech, freedom to peaceably assemble, form unions, and move throughout the country. Article 20 gives protection against retroactive conviction of crimes, double prosecution, and compelling a accused person to testify against himself. Article 21 protects life and personal liberty through due process and establishes a right to free and compulsory education. Article 22 provides numerous protects against arrest and detention including the right to an attorney and habeas corpus. Additional articles in Part III protect against forced labor, and child labor in hazardous jobs, freedom of conscience and free practice of religion.

In addition to the actual protections of Fundamental Rights found in Part III, Article 32 provides a fast-trac option for enforcement.[4] Fundamental rights-based claims need not

[4]See Craig & Deshpande (1989) for a discussion of the development of rights enforcement through public interest litigation.

progress through lower courts before finally appealing to the Supreme Court. Claimants charging the state with an infringement of fundamental rights may file public interest litigation (PIL) in the Supreme Court. Public interest litigation is rooted in Article 32 which confers the "right to move the Supreme Court by appropriate proceedings for the enforcement of the rights conferred by [Part III]." Public interest litigation rose to prominence in the late 1970s and was used to pursue women's rights, various civil liberties and environmental protections (Galanter 1990). More recently Krishnan (2003) examined public interest litigation on behalf of people with HIV/AIDS, finding that public interest litigation has made some promising steps toward protecting human rights.[5]

3.0.2 Emergency Powers and President's Rule

Articles 352 through 360 of the Constitution of India lay out the emergency provisions. These provisions can be classified into three distinct categories: Articles 352, 353, 354, 358, and 359 relate to "emergency proper",[6] Articles 355, 356, and 357 describe President's Rule, and Article 360 relates to financial emergencies. According to the Commission on Centre State Relations' report (2010), no Article 352 emergency has been declared since 1977 and no constitution challenges face the country currently as a result of Article 360.

Article 352 outlines emergency powers when "a grave emergency exists whereby the security of India or of any part of the territory is threatened." The emergency powers under such conditions extend to instances of war or external threat as well as armed rebellion. Article 352, authorizes the President to issue a proclamation of emergency, extending to the entire country or any part of the territory that may be affected. A proclamation of emergency expires after 30 days unless the both Houses of Parliament approve the proclamation by resolution. Provided both houses of Parliament approve, the

[5]For additional discussion of judicial activism, fundamental rights in the Supreme Court, and public interest litigation since emergency rule see Sathe (2001).

[6]See footnote 159 on page 91 of Commission on Centre State Relations Report Volume II.

emergency proclamation continues in full force for six months. Articles 353 and 354 return all executive and legislative authority of the affected States to the Central Government and give the Central Government power complete discretion over taxes and other revenues. Articles 358 and 359 further extend the power of the president during an emergency proper by authorizing the suspension of Article 19 and Part III Fundamental Rights.

Table 3.1: President's Rule in India

State	Beginning Date	Ending Date
Manipur	6/2/2001	3/6/2002
Uttar Pradesh	3/8/2002	5/2/2002
Jammu & Kashmir	10/18/2002	11/2/2002
Goa	3/4/2005	6/7/2005
Bihar	5/23/2005	11/24/2005
Karnataka	10/9/2007	11/11/2007
Nagaland	1/3/2008	3/12/2008
Karnataka	11/20/2007	5/27/2008
Jammu & Kashmir	7/11/2008	1/5/2009
Meghalaya	3/18/2009	5/12/2009
Jharkhand	1/19/2009	12/29/2009
Jharkhand	6/1/2010	9/11/2010

Source: Various reports at `http://mha.nic.in/home.asp` and Commission on Centre-State Relations Reports.

Article 355 requires the Union to "to protect every State against external aggression and internal disturbance and to ensure that the Government of every State is carried on in accordance with the provisions of this Constitution." Article 356 describes a power commonly referred to as "President's Rule" or central rule.[7] This provision authorizes the president to declare a state of emergency after concluding that a "failure of [the] constitutional machinery" exists in one or more States. During the state of emergency, the governor of the state and the state legislature may be dismissed and all executive power over the failed state may pass to the president and the legislative authority, passed

[7]The text of article 356 is reprinted for the readers convenience in appendix B.1. For a history and excellent discussions of the use of president's rule see Dua (1979) and Reddy & Joseph (2004).

to Parliament. Parliament may however give the President power to make laws or the power to delegate lawmaking powers to another authority (Article 357). Laws authorized under Article 357 remain in full force even after the proclamation of emergency ceases, until a competent legislature repeals or amends the law.

Articles 356 and 357 effectively place states within the control of the president and the dominant political party in the central government during the declaration of an emergency. Unsurprisingly, President's Rule has been frequently abused for political ends (Reddy & Joseph 2004, Sadanandan 2012). For example, President's Rule has often been used to consolidate power in the center and silence political opponents (Commission 1988). But since the mid-1990s, the imposition of President's Rule has sharply declined. Sadanandan (2012) asserted that changes in party politics, namely party alliances and coalitions, have proven to be an effective safeguard against abuses of President's Rule. I did not consider the periods of President's Rule listed in Table 3.1 when developing a measure of crisis. The periods of President's Rule since 2001 were short-lived and exclusively the result of close or contested election results. None of the instances were related to a national crisis or dispute with another nation.

3.0.3 The Judicial System of India

The judiciary of India is a hierarchical system composed of the Supreme Court of India, State High Courts, District Courts, and various lower courts and magistrates. The Supreme Court was inaugurated on January 28, 1950, two days after India won independence from the United Kingdom.[8] Articles 124 through 147 of the Constitution of India established the Supreme Court, its original size, jurisdiction, and other rules. The Supreme

[8]The Supreme Court's website `http://www.supremecourtofindia.nic.in`, served as primary reference for the history and rules of procedure for the Court.

Court of India sits atop a federal judiciary composed of 21 High Courts[9] with individual territorial jurisdictions. Table 3.2 reports the most accurate listing of High Courts known to be in operation at the time of this writing. Each High Court is listed with the year of its inauguration and State of jurisdiction.

Table 3.2: The High Courts of India

Name	Year	Territorial Jurisdiction
Allahabad	1866	Uttar Pradesh
Andhra Pradesh	1956	Andhra Pradesh
Bombay	1862	Maharashtra, Goa, Dadra and Nagar Haveli and Daman and Diu
Calcutta	1862	West Bengal
Chhattisgarh	2000	Chhattisgarh
Delhi	1966	Delhi
Gauhati	1992	Manipur
Gujarat	1960	Gujarat
Himachal Pradesh	1971	Himachal Pradesh
Jammu & Kashmir	1928	Jammu & Kashmir
Jharkhand	2000	Jharkhand
Karnataka	1884	Karnataka
Kerala	1958	Kerala & Lakshadweep
Madhya Pradesh	1956	Madhya Pradesh
Madras	1862	Tamil Nadu & Pondicherry
Orissa	1948	Orissa
Patna	1916	Bihar
Punjab & Haryana	1975	Punjab, Haryana & Chandigarh
Rajasthan	1949	Rajasthan
Sikkim	1975	Sikkim
Uttarakhand	2000	Uttarakhand

Source: `http://www.indiancourts.nic.in/courts/indian_jud.html`.

Article 124 originally fixed the size of the Court at one Chief Justice and seven puisne or

[9]The Indian Court website (`http://www.indiancourts.nic.in/`) gives somewhat conflicting information regarding the exact number of High Courts. One page states that there is one Supreme Court and 21 High Courts, however, 22 High Courts are listed. In another section, only 18 High Courts are named. These discrepancies are most likely due to the establishment of the Gauhati High Court in 2000 and consolidation of several smaller courts.

junior judges. This early Court sat *en banc* to hear cases, however, as the Court's caseload grew, Parliament increased the number of judges and the Court began sitting in smaller benches of two or three judges. There are currently 24 junior judges on the Supreme Court and one Chief Justice. The *Supreme Court (Number of Judges) Amendment Act* of 2009 authorizes a total of 30 junior judges in addition to the Chief Justice, however, not all seats are currently filled. Table 3.3 lists all 25 current justices of the Supreme Court, ordered by date the justice assumed office.

The Supreme Court exercises original, appellate, and advisory jurisdiction. Original jurisdiction of the Court extends to all cases involving the Central Government and one or more states or between two or more states if the legal question involves the existence or extent of legal rights. Article 32 also gives the Court original jurisdiction for the purpose of enforcing Fundamental Rights. Articles 13 and 32 may be read together as giving the Supreme Court the power of judicial review to enforce the Fundamental Rights found in Part III. In addition to this grant of judicial review, *Keshavananda Bharati v. State of Kerala*[10] established judicial review over constitutional amendments passed by Parliament that violate the "basic structure" of the Constitution. The Supreme Court also has administrative powers over lower courts such as the power to transfer cases between State High Courts or from a lower to the Supreme Court. The Court may exercise advisory jurisdiction on issues referred by the president or on matters of public interest. To initiate public interest litigations, an individual or group may file a Writ Petition with the Court or address a letter to "The Hon'ble the Chief Justice." The Supreme Court is an independent Court. Judges enjoy some of the same protections as federal judges in the United States. For example, Indian Supreme Court judges can only be removed from office by parliamentary impeachment for misbehavior or incapacitation and their salaries cannot be decreased while in office.

[10] *Keshavananda Bharati v. State of Kerala*, AIR 1973 SCI 461, April 24, 1973.

Table 3.3: The Current Justices of the Supreme Court of India

Justice	Assumed Office	End of Term
Altamas Kabir*	9/9/2005	7/18/2013
D.K. Jain	4/10/2006	1/24/2013
P. Sathasivam	8/21/2007	4/26/2014
G.S. Singhvi	11/12/2007	12/11/2013
Aftab Alam	11/12/2007	4/18/2013
R.M. Lodha	12/17/2008	9/27/2014
H.L. Dattu	12/17/2008	12/2/2015
Balbir Singh Chauhan	5/11/2009	7/1/2014
A.K. Patnaik	11/17/2009	6/2/2014
T.S. Thakur	11/17/2009	1/3/2017
K.S. Panicker Radhakrishnan	11/17/2009	5/14/2014
Surinder Singh Nijjar	11/17/2009	6/6/2014
Swatanter Kumar	12/18/2009	12/30/2012
Chandramauli Kumar Prasad	2/8/2010	7/14/2014
H.L. Gokhale	4/30/2010	3/9/2014
Gyan Sudha Misra	4/30/2010	4/27/2014
Anil R. Dave	4/30/2010	11/18/2016
Sudhansu Jyoti Mukhopadhaya	9/13/2011	3/14/2015
Ranjana Prakash Desai	9/13/2011	10/29/2014
Jagdish Singh Khehar	9/13/2011	8/27/2017
Dipak Misra	10/10/2011	10/2/2018
Jasti Chelameswar	10/10/2011	6/22/2018
Fakkir Mohamed Ibrahim Kalifulla	4/2/2012	7/22/2016
Ranjan Gogoi	4/23/2012	Not Set
Madan Bhimarao Lokur	6/4/2012	12/30/2018

*Asterisk denotes the current Chief Justice of the Supreme Court.
Source: `http://supremecourtofindia.nic.in/judges/judges.htm`.

3.1 Review of Research on Judicial Decision Making in the Supreme Court of India During Crisis

C. Neal Tate's (1993) study on national high courts and their interactions with crisis regimes provided a strong theoretical foundation for an empirical analysis of decision making during crisis in the Supreme Court of India. Tate's study focused on "crisis

regimes" which he defined as "a political system which is initiated by the sudden seizure of new or drastically expanded executive powers by a political leader for the purpose of coping with the demands of a leader-proclaimed extraordinary crisis," (Tate 1993, 316). While this definition is not directly comparable to definitions of crisis usually found in the crisis theory literature, Tate's work nevertheless offered some insight into how the Indian Supreme Court responded to one type of crisis at a particular point in the Court's history. Tate employed a case study approach to examine the relationship between the national high courts and crisis regimes of Pakistan, the Philippines, and India during the 1970s. His main thesis suggested that crisis regimes benefit from compliant courts, but compliance required a different set of tactics on the part of the crisis regime given their diverse political circumstances. Tate found that these crisis regimes eventually coopted the courts to their advantage. This finding is in line with one variant of the crisis thesis: courts defer to the government during crisis.

Tate contributed enormously to comparative judicial literature by developing a set of criteria for comparing the relative performance of national high courts. He focused primarily on two sets of criterion, structure of the court and the court's function. Structural criteria included independence of the court, impartiality of judges, and the scope and depth of decision making. Tate defined independence as the ability of judges to interpret the law in ways that oppose the dominant political powers. Courts that decide cases according to legal rules as opposed to the preferences of influential parties are considered impartial. Scope and depth of decision making referred to the range of subject matter within the court's jurisdiction and the extent to which the court may invalidate rules and the actions of the executive.

Tate also adopted a series of functional arguments that relate more to the role courts play within society. For example, courts may take on a regime limiter role in which the court is concerned with balancing the power of the government against individual citi-

zens' rights. Courts also provide conflict resolution and arbitration of disputes, serve as administrators of criminal justice, and enhance government legitimacy. In each of Tate's crisis regimes, the chief executive declared a state of emergency, assumed various emergency powers, and imposed restrictions on his/her opposition. Interestingly however, the bureaucracies and courts were initially allowed to continue business as usual. According to Tate, bureaucracies are often too large for full-scale restructuring. The crisis regimes need functioning bureaucracies to carry out the day-to-day operations of government and maintain functional control of the country. Courts also serve a variety of useful purposes for crisis regimes such as increasing the regime's perceived legitimacy. Alternatively, direct attacks on the judiciary by a crisis regime could signal a lack of respect for the constitutional order, thus weakening the regime's claim to legitimacy. Crisis regimes may nevertheless attempt to gain control of the judiciary by replacing some judges, restricting the independence of the courts, or altering the jurisdiction of the courts. Tate found support for each of these behaviors by the crisis regimes he analyzed. Crisis leaders in each case showed at least initial outward support for existing judicial structures, but eventually adopted measures to restrict the courts' ability to seriously challenge the regime's rule. Tate concluded that crisis regimes need the civil courts to establish legitimacy, but they also need compliant, non-confrontational courts. In the three cases presented, the high courts initially showed some signs of defiance, but often lacked the will or ability to offer serious challenges to the crisis leaders. Additionally, the courts also did not vigorously defend the rights of the opposition who were often targeted by the crisis regimes.

Prior to the emergency regime of Indira Gandhi in the mid-1970s, the Indian Supreme Court was considered to be a well-respected, independent court (Tate 1993), as such, the Court rated high on all of Tate's structural criterion. The courts and Gandhi's regime were pitted against one another though over disputed election results that could have denied Gandhi her seat in Parliament. The Prime Minister and Parliament acted quickly to adopt

measures and even constitutional amendments that secured her position and the Supreme Court somewhat reluctantly affirmed her position. While the Supreme Court ultimately legitimized her rule, it nevertheless struck down a portion of Amendment 39 which would have placed election disputes beyond the scope of judicial review (Tate 1993, 329). Tate's analysis suggests that during times of national crises, the Indian Supreme Court adopted a crisis jurisprudence in accordance with the expectations of the crisis thesis.

3.2 Hypothesis and Data

During a time of national crisis, security concerns become paramount. According to the crisis thesis, governments adopt policies designed to strengthen national security and restore order at home. When these policies conflict with civil liberties, claimants take their grievances to the courts for relief. According to the crisis thesis, the courts become more conservative in civil liberties cases during crisis. Previous research has grouped criminal appeals cases with other civil liberties cases (Epstein et al. 2005). In the previous chapter, I demonstrated that crisis affects both criminal appeals cases and civil liberties cases, and these effects are not identical over time.

Is the crisis thesis generalizable to the Supreme Court of India? Certainly the historic record suggests the Court is willing to be subservient to the central government during extraordinary times. Tate's research found that during the Indira Ghandi crisis regime in India, the government relied heavily on President's Rule, bullied the courts, and wielded their judicial power to suppress and imprison the opposition. Abuses of President's Rule like this however were recognized and dealt with in *S.R. Bommai v. Union of India*[11] which laid down principles for the use of President's Rule and established the power of judicial review over the a presidential proclamation of emergency. President's Rule

[11] *S.R. Bommai v. Union of India*, (1994) 3 SCC 1, 296-297, 434. See also Harish (1995).

since *Bommai* has been used in a limited manner, generally for short durations following contested election results. President's Rule is not a significant source of crisis in India and is not contemplated by this project. Rather I focus on more traditional crisis triggered by international events. Crisis is discussed more in depth and the specific crises detailed in the next section. In order to test the crisis thesis in the Indian context, I adopt the following hypothesis:

H4 Observed outcomes in Indian Supreme Court criminal appeals cases decided during crisis will be more conservative than would be expected if crisis did not happen.

3.2.1 Data Availability and Acquisition

Currently, the only large-scale dataset available for a study of the Indian Supreme Court resides in the High Courts Judicial Database (HCJD) (Haynie et al. 2007). The HCJD contains coded information on the formal decisions reported by 11 Anglo-American, common law high courts that use English as their primary working language. However, since the Supreme Court of India reports hundreds of cases each year, the architects of the database randomly sampled only one hundred cases for each year of coverage. These cases were not necessarily sampled for representativeness with respect to the types of litigants or issues represented in the resulting dataset. And unfortunately, this data source has not been maintained or updated for India beyond the year 2000.[12] In addition, a review of randomly selected cases from this dataset revealed inconsistencies in the application of coding rules. In some cases these inconsistencies were significant enough that outcomes of cases were impossible to ascertain. For these reasons, I chose to develop a new dataset for the Supreme Court of India. This represented a significant undertaking and involved developing highly specialized programming solutions to ensure accuracy and replicability

[12]See table B.2 in the appendix for complete details of the currently available coverage of the HCJD.

of the results. In this section, I discuss the programs and methods used to construct this dataset and provide an overview of the variables included.

3.2.2 Source Material and Retrieval Methods

The Supreme Court of India maintains the Judgment Information System (JUDIS) which makes the judgments of the Supreme Court of India and several High Courts publicly available. At the time of this writing there were two search engines for retrieving judgments within JUDIS. The search engines may be found by navigating to the Court's website and selecting "Judgments".[13] I used *(headnotes:criminal AND type:"Appeal (crl.))"* as a keyword search to retrieve a set of 2008 criminal appeals cases with accompanying machine readable text. The search results return in a table that includes date of judgment, case type, case citation number, participating judges' names, name of the petitioner(s), name of the respondent(s), and the deciding court. Since case type was restricted to criminal appeals cases, only Supreme Court judgments were returned. These results were returned in 201 separate webpages and in order to retrieve text from the judgments, each link needed to be followed and the text, copied into individual text files. Figure 3.1 shows the first results page returned from the above search request.

I automated the data collection process by writing two custom built web-scraping packages. Both packages were developed in Python 2.7 which is a very flexible programming language available as an open source program.[14] I used commands from the URLLIB, URLLIB2, URLPARSE, and BeautifulSoup4 libraries to facilitate scraping the webpages and parsing all scraped text. The first script was essentially a web-crawler. This script crawled each page of the search results, following all links on the search pages to the

[13]This selection returns the old search engine. The newest version may be found by selecting "Home" from the Judgments page and at the time of this writing the functioning URL for the new engine was `http://164.100.9.38/judis`. Be aware that this site requires cookies which means if this link does not work for you the first time, try clicking it again.

[14]The Python project and repositories are accessible at `http://www.python.org/`.

Date of Judgement	Case Type	Case Number	Judge Name	Petitioner Name	Respondent Name	Court Name	
7-Jan-2000	Appeal (crl.)	Appeal (crl.) 21 of 2000	S.P. BHARUCHA (J); S.S.M. QUADRI (J)	STATE OF M.P.	BHUPENDRA SINGH	Supreme Court	View
15-Jan-2001	Appeal (crl.)	Appeal (crl.) 86 of 2001	K.T. THOMAS (J); R.P. SETHI (J)	STANNY FELIX PINTO	JANGID BUILDERS PVT. LTD. AND ANOTHER	Supreme Court	View
26-Mar-2009	Appeal (crl.)	Appeal (crl.) 260 of 2004	ARIJIT PASAYAT (J); LOKESHWAR SINGH PANTA (J); P. SATHASIVAM (J)	STATE OF HARYANA	BALKAR SINGH AND OTHERS	Supreme Court	View
27-Mar-2009	Appeal (crl.)	Appeal (crl.) 571 of 2009	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	KALIBEN RABARI	STATE OF GUJARAT AND OTHERS	Supreme Court	View
21-Apr-2009	Appeal (crl.)	Appeal (crl.) 859 of 2004	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	STATE OF RAJASTHAN	BABU LAL	Supreme Court	View
6-May-2009	Appeal (crl.)	Appeal (crl.) 189 of 2003	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	JAKIR	STATE OF M.P.	Supreme Court	View
16-Mar-2009	Appeal (crl.)	Appeal (crl.) 470 of 2009	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	SANTOSH	STATE OF U.P.	Supreme Court	View
24-Apr-2009	Appeal (crl.)	Appeal (crl.) 646 of 2005	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	STATE OF PUNJAB	SURJIT SINGH AND ANOTHER	Supreme Court	View
21-Apr-2009	Appeal (crl.)	Appeal (crl.) 177-178 of 2005	ARIJIT PASAYAT (J); ASOK KUMAR GANGULY (J)	STATE OF M.P.	LAAKHAN @ LAKHAN	Supreme Court	View
11-Feb-2009	Appeal (crl.)	Appeal (crl.) 271 of 2009	ARIJIT PASAYAT (J); MUKUNDAKAM SHARMA (J)	CHINNAPONNU	STATE OF TAMIL NADU	Supreme Court	View

1 2 3 4 5 6 7 8 9 10 next

Figure 3.1: Search Results from the Supreme Court of India Website

individual cases. The second script was the web-scraper. This program was designed to scrape and print the search results tables and text from the individual case pages for further processing. The reader may find it interesting to note that these programming solutions were developed specifically for this project. Web-scraping often requires novel programming solutions since webpages do not necessarily share similar structures or even search and retrieval protocols. The Supreme Court of India website for example, uses cookies encoded with session IDs to track users. This type of tracker requires a unique coding solution to make automated web-scraping possible. Table 3.4 presents a summary of the programs and dictionaries built for this data collection project. Scraping the search results provided a lot of usable data, but in order to perform the kind of analysis required for this project, I needed case outcomes — which side won and ultimately, did the outcome represent a "liberal" or "conservative" outcome. This information could only be found in the text descriptions accompanying each case.

Table 3.4: Software and Dictionaries Developed for Use in this Data Collection Project

Program Name	Function
searchPage	Web-crawler, retrieves links and children of links from search request
printResults	Web-scraper, scrapes contents of tables and text from followed links
searchOutcomes	Natural Language Processing script, matches outcomes of cases and assigns judgment to petitioner, respondent, or unclear
searchIssues	Natural Language Processing script, matches issues raised in cases and assigns 1 or more issues to cases with matching string
classifierIssues	Issue dictionary resulting from SAEtext classification, used to assign 1 primary issue area to each case

3.2.3 Semi-Automated Tools for Extracting Outcomes and Issues

For this project, my primary outcome of interest was the direction of case outcomes. Was the Supreme Court decision liberal or conservative. I adopted the coding definition for liberal outcomes from the U.S. Supreme Court Database. Outcomes in criminal appeals cases favoring the accused were coded as liberal outcomes and outcomes favoring the government, individual, or group against the accused were coded as conservative. In addition to case outcomes, I wanted to capture the sub-issues in cases to differentiate between various categories of criminal charges coming before the Supreme Court during crisis and non-crisis periods. I began this process by closely reading a random selection of approximately 25% of the scraped case texts. I then created a dictionary of text patterns that were indicative of specific outcomes of interest and sub-issues. I also consulted Supreme Court's "List of Revised Subject Categories" available through their website.[15] For the reader's convenience I have reproduced the section relating to criminal matters in the appendix at B.4. The outcomes and issues dictionary created for this project with a complete list of patterns and their associated codings is provided in the appendix at B.3.

[15]The full categories list is available through the Court's website at `http://supremecourtofindia.nic.in/subcat.pdf`.

The issues were bail, death penalty, detention, dowry death,[16] fraud, murder, prevention of corruption, search and seizure and terrorist activities. These issues are listed in Table 3.5 with appropriate statutes or codes.

Table 3.5: Issue Categories and Corresponding Legal Statutes

Issue	Statute
Bail	Code of Criminal Procedure, 1973 S.436-439
Death Penalty	Swamy Shraddananda v. State of Karnataka, 2008
Detention	Constitution of India-Articles 21, 22; Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974-s. 3
Dowry Death	Dowry Prohibition Act, 1961
Fraud & Forgery	Penal Code, Ss. 419, 420
Murder	Penal Code, 1860 Ss. 299, 300, 302, 304, 307
Prevention of Corruption	Prevention of Corruption Act, 1988
Search & Seizure	Narcotic Drugs and Psychotropic Substances Act, 1985
Terrorist Activities	Terrorist and Disruptive Activities Act, 1987

This qualitative review and dictionary creation process was modeled after a government sponsored "issues code-off" event that I participated in during the early spring of 2012. The purpose of that event was to develop an issues dictionary targeted to a specific corpus that was supplied to the code-off participants. Each team was given a short amount of time (we actually began with only two hours, but our corpus was much smaller) to produce dictionaries and code the documents. Once the dictionaries were completed, we applied natural language processing tools to automatically classify documents and extract relevant pieces of information. This exercise and my work on the project following proved invaluable in developing the necessary skill-set to analyze court outcomes and develop a new dataset using semi-automated methods.

I used a variety of natural language processing tools to automate the process of turning

[16]Dowry death or dowry murder is a form of domestic violence generally perpetrated by a husband or in-laws against a married woman who cannot meet certain financial demands. For a recent discussion of this practice and the difficulty of prosecuting the guilty see Musa (2012).

scraped text into data. Since many of the patterns relating to outcomes and issues were so prevalent and in relatively identical form across texts, I used a simple batch file program, which was executed on the command line to return a complete list of cases matching the individual patterns. This solution allowed cases to be matched to multiple patterns and there was some overlap. Combining the results for three outcomes however only resulted in 33 cases that could not be resolved using this semi-automated coding processes. I reviewed the text for each problem case and determined the appropriate outcome to assign to each. These cases typically included language such as "partly allowing the appeal...partly denying...", "allowing in part and denying in part" or in at least two instances, "allowing the appeals filed by the accused and dismissing the appeal filed by the State". The more difficult cases to resolve generally involved multiple petitioners or respondents and multiple decision outcomes in a single case. In these instances, every effort was made to read for the substantive issues and determine whether on the whole, the outcome favored a majority of the petitioners or the government.[17]

I also used SAEtext,[18] which is a natural language processing program, to assign sub-issues to the cases. One feature of SAEtext is an onboard text classification algorithm utilizing the tf-idf, or term frequency-inverse document frequency framework (Jones 1972). Term frequency is often calculated as the number of times a particular term appears in a particular document. The inverse document frequency measures how frequent the same term appears across all documents in the corpus. SAEtext uses bi-gram terms, meaning every sequence of two adjacent words appearing in a given document are considered terms for that document. So the SAEtext classifier operates to differentiate between documents based on the relative frequencies of bigrams appearing in the corpus. In order to

[17]This solution would not necessarily be appropriate for all analyses, but I reasoned that if multiple individuals prevailed against their convictions, that side had won a victory. In any case, the number of these cases was quite small and seemingly randomly distributed across the dataset.

[18]SAEtext is proprietary software of Strategic Analysis Enterprises, Inc. (2009, 2011, 2012). The text classifier, TAXIS, is one component of the system.

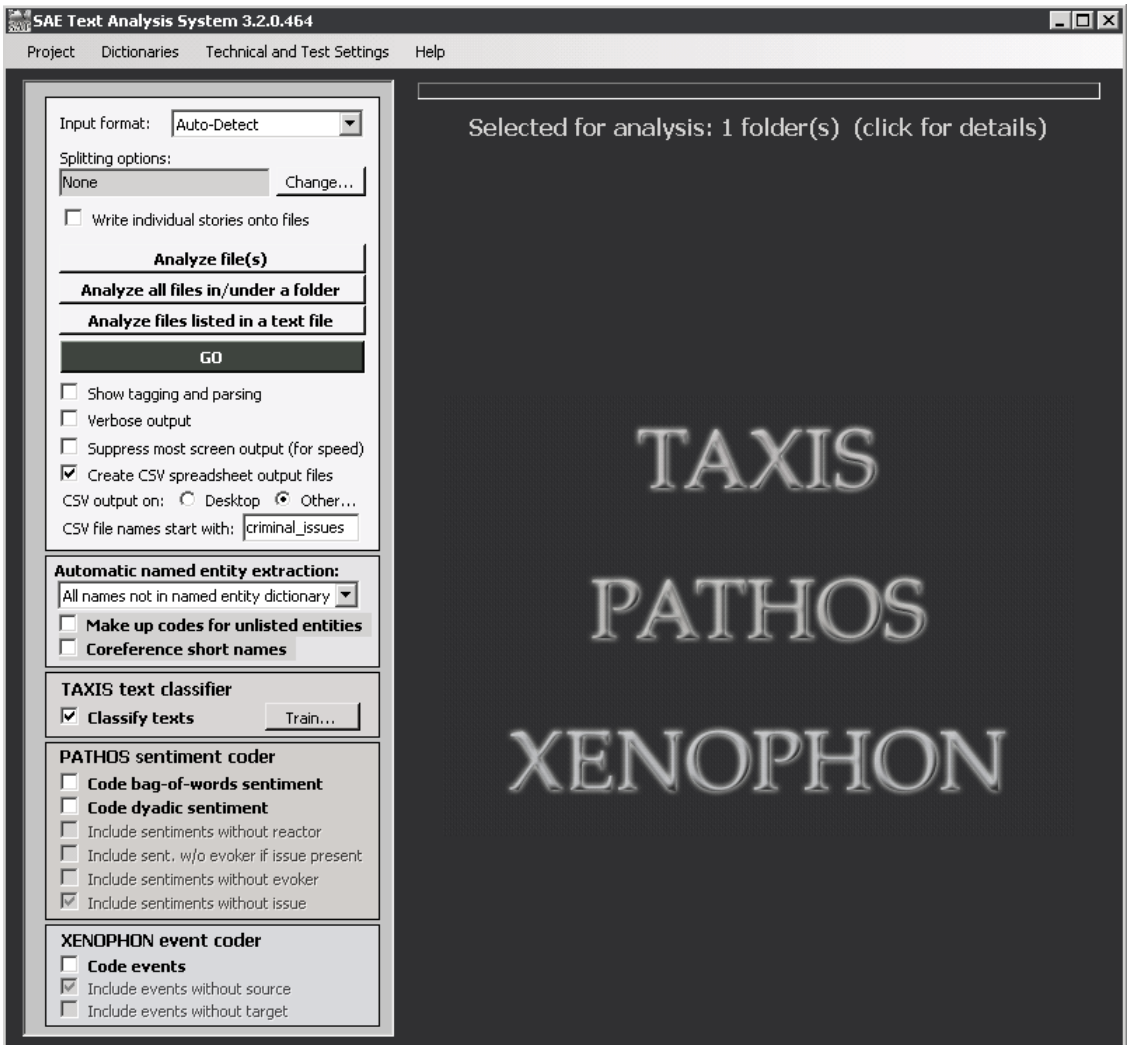

Figure 3.2: Screen Capture of SAEtext

assign specific tags (issues), the classifier needs a set of training documents for each tag. I developed a training set of documents for each issue I wanted to classify by searching for that issue on the website and selecting the top ten cases sorted by relevance. The text from these pages were copied into a folder labeled with the appropriate issue. I then trained the classifier over the training set and used the output to classify the remaining cases. A screen-shot of SAEtext appears in 3.2.

3.2.4 Description of the New Data Source

Once the outcomes of interest and issues were determined for each case, I merged the results into one master dataset. The included variables are listed with a description and example coding in Table 3.6. The example used for this table was randomly chosen from the dataset. The scraped text from this case is included in the appendix at B.4. *CaseId*, *date*, and *caseNum*, are identifiers for the cases. The variables were used primarily for referencing the text of cases and checking the accuracy of codings. *Direction* was the primary dependent variable for all analyses. This variable is a dichotomous variable, coded 1 for liberal outcomes and 0 for conservative outcomes. Four variables: *petGov*, *petRes*, *petWins*, *resWins*, were used to determine the how *direction* should be coded. Outcomes in favor of an accused individual against a government entity were coded as liberal and outcomes favoring the government were coded as conservative. There were nineteen cases which could not be classified using this approach and they were hand-coded to ensure accuracy. *Crisis* is a dichotomous variable indicating the presence (1) or absence (0) of crisis. The remaining variables provide additional information regarding specific acts and issues referenced in the cases. Table 3.7 gives descriptive statistics for each of the dichotomous variables. The number of cases coded as either 1 or 0 are displayed.

3.2.5 Crisis in India

The primary variable of interest of course is the presence of crisis. I used multiple sources to determine periods of international crisis in India. The first resource I consulted was the Correlates of War Project (COW)[19] which collects data on various types of political crises and violence. COW datasets report instances of inter-state wars, extra-state wars, intra-state wars, and non-state wars. Wars are distinguished from lower levels of violence

[19]The Correlates of War Project was last accessed on June 1, 2011 at `http://www.correlatesofwar.org`.

Table 3.6: Indian Supreme Court Database: Variables and Description

Variable Name	Description	Variable Type And Example
caseId	Unique identifier for each	Numeric: 25837
date	Date of judgment	POSIX Date: 2009-02-12
caseType	Type of case	String: "Appeal (crl.)"
caseNum	Citation number	String: "786-789 of 2003"
pet	Petitioner name(s)	String: "State of Punjab"
res	Respondent name(s)	String: "Majit Singh and Others"
court	Name of presiding court	String: "Supreme Court"
petGov	Is the petitioner a Government entity	Dichotomous: 1
resGov	Is the respondent a Government entity	Dichotomous: 0
govParty	Is the government a party to the case	Dichotomous: 1
multiPet	Are there multiple petitioners	Dichotomous: 0
multiRes	Are there multiple respondents	Dichotomous: 1
crisis	Was this case decided during crisis	Dichotomous: 1
petwins	Petitioner prevailed in the case	Dichotomous: 0
reswins	Respondent prevailed in the case	Dichotomous: 1
direction	Is the outcome a "liberal" outcome	Dichotomous: 1
cofeposa	Issue: COFEPOSA	Dichotomous: 0
murder	Issue: murder	Dichotomous: 1
deathPenalty	Issue: death penalty	Dichotomous: 1
dowryDeath	Issue: dowry death	Dichotomous: 0
corruption	Issue: Prevention of Corruption Act	Dichotomous: 0
terroristAct	Issue: Terrorist Act	Dichotomous: 0
bail	Issue: bail	Dichotomous: 0
detention	Issue: criminal detention	Dichotomous: 0
fraud	Issue: fraud	Dichotomous: 0
searchSeizure	Issue: search and seizure	Dichotomous: 0

by the number of deaths over a sustained period of combat. According to COW, wars begin on the date of a formal declaration of war or the first day of a sustained period of combat. War continues until the involved states formally terminate the war or as long

Table 3.7: Descriptive Statistics

Variable Name	Number of Cases Coded as 1	Number of Cases Coded as 0
petGov	312	1077
resGov	1062	327
govParty	1372	17
multiPet	447	942
multiRes	441	948
crisis	576	813
petwins	712	677
reswins	677	712
direction	559	830
cofeposa	21	1368
murder	187	1202
deathPenalty	89	1300
dowryDeath	1348	41
corrouption	84	1305
terroristAct	62	1327
bail	48	1341
detention	34	1355
fraud	71	1318
searchSeizure	52	1337

as military combat operations persist resulting in 1,000 battle-related deaths per year.[20] The COW datasets did not list any wars for India during the period of analysis. COW did however reference a conflict beginning in 1990 and lasting until 2005 in the state of Kashmir. This conflict however was labeled as an insurgency and corresponded to an ongoing conflict in Kashmir. While insurgency does not fit the definition of crisis for my purposes, additional sources revealed punctuated periods within this conflict that is better characterized as an international conflict.

After reviewing the COW datasets, I turned to the World Integrated Crisis and Early Warning System (WICEWS). The WICEWS program which is currently funded through

[20]See Sarkees & Wayman (2010) for specific coding rules and a full typology of COW wars.

the Office of Naval Research, is an extension of the ICEWS program which originated under the Defense Advanced Research Projects Agency (DARPA). WICEWS program objectives include the development of forecasting tools to accurately anticipate the outbreak of violent political conflict through the world. The primary WICEWS dataset[21] includes dichotomous measures, referred to as "ground-truth", for four events of interest (EOIs): rebellion, insurgency, domestic political conflict, ethnic-religious violence, and international crisis. WICEWS defines international crisis as a major political crisis involving 2 or more countries (Levey 2012, O'Brien 2010). Events triggering an international crisis may include one or more of the following:

- A breakdown of diplomatic relations: ambassadors are recalled by their own country or are deported by the host country.
- Refugee crises: some event triggers a mass migration from one country to another resulting in strained relations between 2 or more countries.
- Shows of force or military posturing: Country A conducts military exercises, possibly along a border or in a disputed region, to intimidate or threaten a neighboring country.
- Open clashes between 2 or more countries involving the use of force.

The indicator for international crisis was originally hand-coded by the government following an extensive qualitative review of political violent events in the region. The qualitative review made use of various online sources such as media reports, government websites and press releases, and even Wikipedia. I became involved in coding future events of interest using similar protocols just after this initial ground-truth data had been

[21] My work as one of the principle statistical modelers on this project afford me unrestricted access to this data. This data are not classified and is marked to be released publicly at a future date (not yet determined).

established.[22] Table 3.8 reports a selections of primary sources we used to determine conflict onsets and duration.

Table 3.8: Sources for Determining Conflict Onset and Duration

Source	Website
Correlates of War	http://www.correlatesofwar.org/
Heidelberg Institute	http://www.hiik.de/en/index.html
Human Rights Watch	http://www.hrw.org
Jane's	http://www.janes.com
South Asia Terrorism Portal	http://www.satp.org/
START	http://www.start.umd.edu/start/
U.S. State Department	http://www.state.gov/

India experienced three periods of crisis between January 2001 and July 2012, involving Pakistan and Bangladesh. The primary contention between India and Pakistan is the disputed region of Jammu and Kashmir which lies in the north of India. The sole crisis involving Bangladesh concerned administration of land around a common river. Excerpts from various sources and news articles used to validate the following crisis periods are printed for the reader's convenience in the appendix at B.5.

India and Pakistan 1998 - 2003

The early period of crisis began in 1998 when India carried out a series of nuclear tests at the Pokhran test range. The nuclear tests not only violated the Comprehensive Nuclear Test Ban Treaty (1996), but embarrassed U.S. intelligence who failed to see the tests coming. "This colossal failure of our nations intelligence gathering could set off a nuclear arms race in Southeast Asia, Shelby said in a statement," (CNN World News, May 12, 1998). In addition, seismometers set up to detect nuclear detonations apparently failed to detect four of the five blasts (New York Times, May 15, 1998). World opinion largely condemned

[22] At the time of this writing, I am employed by a defense contracting firm, headquartered in Williamsburg, Virginia and have been heavily involved in our efforts under the WICEWS program.

India's nuclear test as many feared the act would spark a nuclear arms race between India and Pakistan. These fears weren't unjustified. Just days following the tests, a Pakistani senior diplomat responded "India's actions, which pose an immediate and grave threat to Pakistan's security, will not go unanswered," (New York Times, May 15, 1998). By the end of the month, Pakistan conducted similar underground nuclear tests (New York Times, May 29, 1998).

The exchange of nuclear tests raised tensions between India and Pakistan and fighting between the two countries intensified particularly in the Kashmir region. Kashmiri insurgents, aided by Pakistani soldiers, clashed with Indian security forces on numerous occasions, culminating in the Kargil conflict in the summer of 2009.[23] Ultimately, India pushed back Pakistani soldiers and reclaimed lost territory. But India maintained that Pakistan was behind the Kashmir insurgency. On December 13, 2001, terrorists attacked the Indian Parliament building, killing twelve people and injuring others (Philippine Daily Inquirer, December 17, 2001). India immediately blamed the attack on Pakistani-based terrorist organizations Lashkar-e Taiba and Jaish-e-Mohammed (New York Times, December 17, 2001. Union Home Minister L.K. Advani stated, "It is now evident that the terrorist assault on the Parliament House was executed jointly by Pak-based and supported terrorist outfits, namely, Lashkar-e-Taiba and Jaish-e-Mohammed. These two organizations are known to derive their support and patronage from Pak ISI."[24] The December 13 attack led to a large Indian military buildup along the Line of Control.[25] The two countries looked to be on the brink of war until U.S. diplomatic talks calmed tensions in June 2002 (New York Times, June 4, 2002). By mid-2003, the two countries began repairing diplomatic relations, much due to Prime Minister Vajpayee's (India) remarks in Srinagar, Kashmir

[23]Source: BBC News, Kargil conflict timeline available at `http://news.bbc.co.uk/2/hi/south_asia/387702.stm`.

[24]See *Suo motot Statement in the Lok Sabha by Union Home Minister L.K. Advani on the December 13 Terrorist Attack on Parliament House*, available on the South Asia Terrorism Portal at `http://www.satp.org/`.

[25]See BBC News: India-Pakistan: Troubled Relations 2001 in the appendix at B.5.

(BBC, May 9, 2003).[26] Prime Minister Vajapayee and President Musharraf formally agreed to a ceasefire on November 26, 2003.

India and Bangladesh 2005 - 2007

This conflict involved an ongoing border dispute between India and its neighbor, Bangladesh, which came to a head soon after India erected a fence along the border (BBC News, April 17, 2005). The border dispute between India and Bangladesh has a long history involving management of the Mahananda River, land and resources on either side of the river. India claimed that the construction of a dam on the Mahananda River violated a 1975 border agreement between the two countries and the project would cause erosion on the Indian side of the river. Bangladesh asserted that India's claims were simply designed to avert attention from their fence project (*Conflictbarometer* 2005).

India and Pakistan 2009 - 2010

The final period of crisis centered around the November 2008 terrorist attacks in Mumbai which left at least 164 people killed and hundreds more injured (U.S. State Department). India held Lashkar-e-Toiba and Pakistan responsible for the attacks, and relations between the countries once again turned for the worse (BBC News, December 10, 2008). Peace talks between India and Pakistan resumed and tensions decreased by September 2010 (Reuters, September 29, 2010).

Once I operationalized crisis, I calculated the number of cases decided in favor of the accused. The percentage of liberal outcomes is shown in Figure 3.3. Periods of crisis are shaded for easy reference. There doesn't appear to be a marked difference in the percentage of liberal decisions during crisis. The trend line instead appears to decline

[26] See also *Statement made by Indian Prime Minister Atal Behari Vajpayee in the Parliament on restoration of diplomatic ties with Pakistan on a reciprocal basis, May 2, 2003*, available on the South Asia Terrorism Portal at `http://www.satp.org/`.

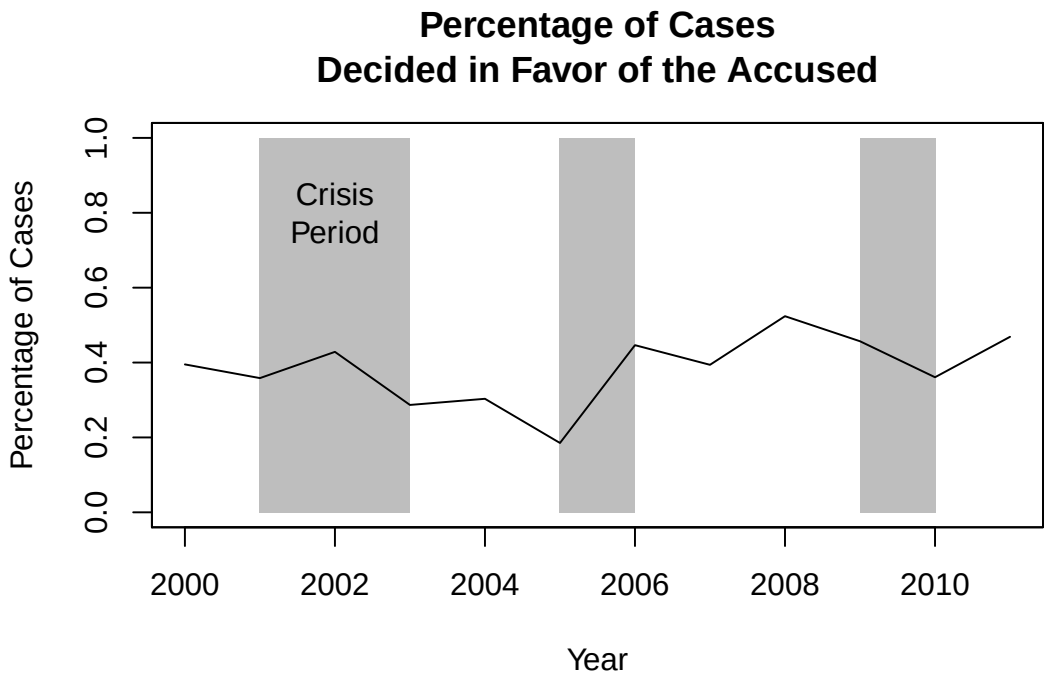

Figure 3.3: Liberal Outcomes in Indian Supreme Court Criminal Appeals Cases

from 2000 to 2005 and then turn back up in the period following.

3.3 Empirical Analysis and Discussion of the Results

3.3.1 Traditional Statistical Approach

I began an empirical investigation into the effects of crisis on the Supreme Court of India by fitting a logistic regression model to the criminal appeals cases in the new dataset. I included an indicators for crisis, whether the government participated in the case as petitioner, whether one or more respondents participated in the case, whether the death penalty was raised as an issue, the total number of issues present, and the number of judges participating in the case. Table 3.9 presents results from this model. Crisis was not statistically significant in the traditional logistic regression model, but a number of the other variables were significant. Government participation in a case decreased the probability of a liberal out outcome. The probability of a liberal outcome decreased as the number of issues increased and liberal outcomes were less likely to obtain in death penalty cases. The presence of multiple respondents increased the probability of a liberal outcome for at least one of the respondents.

As discussed in Chapter 2, I was more concerned with the substantive impact of crisis than with statistical significance. Following the procedures described in section 2.3.1, I estimated predicted probabilities from this regression model. Two sets of probabilities were estimated: the probability of a liberal decision given no crisis and the probability of a liberal decision given crisis. I then calculated the average treatment effect (ATE) over all cases, which is simply the difference between these two predicted probabilities. I also calculated the average treatment effect on the treated (ATT) by sub-setting the results for each year that experienced crisis.[27] In addition to the traditional estimates of the effect

[27]Unlike the analysis presented in Chapter 2, there were two years with both crisis and non-crisis cases

Table 3.9: Logistic Regression of Liberal Outcomes in Civil Liberties Cases

Intercept	0.4099***
	(0.0993)
Crisis	-0.0387
	(0.0264)
Government is Petitioner	-0.1972***
	(0.0320)
More than 1 Respondent	0.0755**
	(0.0287)
Death Penalty	-0.1338*
	(0.0623)
Number of Issues Present	-0.0225
	(0.0339)
Number of Judges Present	0.0313
	(0.0417)

$^{***}pr < 0.0001$, $^{**}pr < 0.001$, $^{*}pr < 0.01$
Standard errors presented in parentheses.

of crisis on criminal appeals case outcomes, I also calculated counterfactual estimates for the crisis cases by running a the model over only those cases not experiencing crisis and predicting counterfactual outcomes for the crisis cases. Counterfactual estimates were then calculated for the non-crisis cases by running the model over the crisis cases and predicting counterfactual outcomes for the non-crisis cases. These effects of crisis on criminal appeals case outcomes are presented in Figure 3.4.

All estimated effects were negative, indicating that crisis *decreased* the probability of liberal outcomes in criminal appeals cases. The average treatment effect suggest the impact of crisis was approximately -4%. The counterfactual estimate was also very close to this value. I also estimated the average treatment effect on the treated (ATT) for each crisis period. I used crisis periods rather than years to disaggregate the effect since there were a small number of cases in some terms. The crisis periods were: 2000-2003, 2005-2006,

decided in the same year. Extra caution was taken to ensure that the correct predictions were used to calculate the ATT in these years.

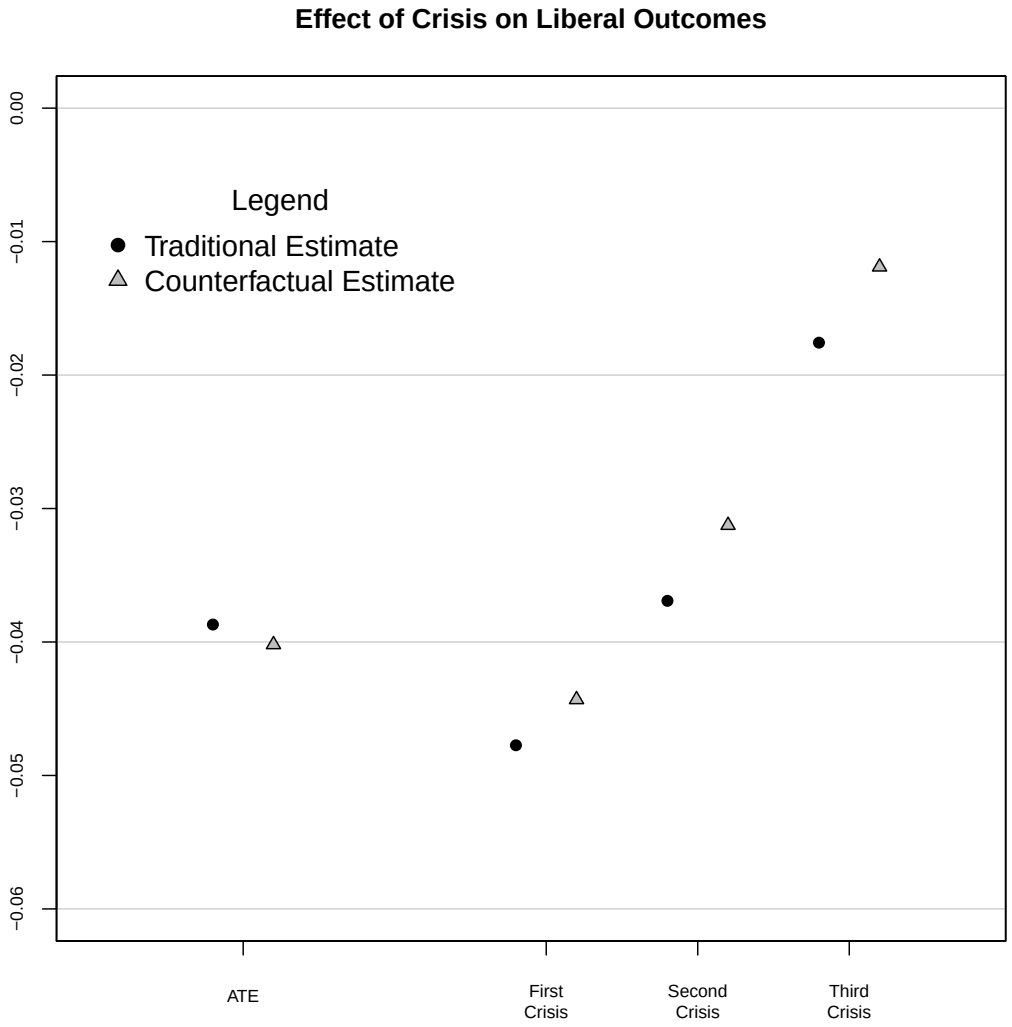

Figure 3.4: Estimated Effects of Crisis on Case Outcomes via Logistic Regression in the Supreme Court of India

2009-2010. Crisis appeared to have a stronger effect during the first crisis period. The estimated effect was −4.8%. By the third crisis period, the effect had become quite small, approximately −1.5%.

3.3.2 Matched Case Analysis

In this section, I present results from matched case analysis over criminal appeals cases. I used the same matching procedures and estimation techniques described in section 2.4.2 to make the results as comparable as possible. I used the genetic matching algorithm in the *Matching* package for R to match the cases. The variables from the logistic regression model described in the previous section were used in the matching procedure and in logistic adjustment after matching. Table 3.10 shows the before and after matching sample statistics for each variable. Notice that matching has improved balance for each variable. This matching solution represented the best overall matched dataset that was obtained using the *Matching* package.

Table 3.10: Balance Statistics Before and After Matching for Combined Cases

	Before Matching		After Matching	
	Mean Treated Mean Control	Std Mean Difference	Mean Treated Mean Control	Std Mean Difference
	Combined Civil Liberties Cases			
Government is Petitioner	0.1961 0.2447	-12.2258	0.2246 0.2246	0.0000
More than 1 Respondent	0.3159 0.3185	-0.5589	0.3174 0.3174	0.0000
Death Penalty	0.0798 0.0528	9.9407	0.0633 0.0626	0.2954
Number of Issues Present	1.2725 1.1968	16.0458	1.2210 1.2239	-0.6639
Number of Judges Present	2.0694 2.0824	-3.7370	2.0770 2.0791	-0.6931

Following the matching procedure, I calculated the average treatment effect (ATE) and average treatment effect on the treated (ATT) in the matched dataset. Figure 3.5 shows these effects. The estimates of the effect of crisis calculated on the matched data are negative and slightly larger compared to the effect sizes obtained from the traditional analysis. The average treatment effect (ATT) was approximately −5%. The effect of crisis during the second crisis period was also more pronounced. However, the counterfactual estimates differ greatly compared to the matching estimate and traditional estimates calculated over the un-modeled matched dataset. The divergence here is due to residual errors from the modeling adjustment. I rely on the estimates calculated from the matching procedure alone which represents a more conservative estimate of the effect of crisis. Despite the differences in estimates, multiple methods and estimation techniques support the conclusion that crisis decreased liberal outcomes in criminal appeals cases coming before the Indian Supreme Court during periods of crisis.

3.4 Conclusion

In this project, I set out to extend research on the crisis thesis beyond the American judiciary. Previous research on the Supreme Court of India suggested that this court might be an appropriate venue for an empirical analysis. The High Courts Judicial Database would have been an ideal data source, but unfortunately the data for India had not been updated and the coverage represented only a small fraction of the population of cases reported out of the Supreme Court of India. For these reasons, I determined to construct a new data source of criminal appeals cases. I developed specialized web-crawling and web-scraping programs to read text for the cases into text files. I then used a combination of keyword searches and a state-of-the-art text classifier to assign outcomes of interest and sub-issues to each case.

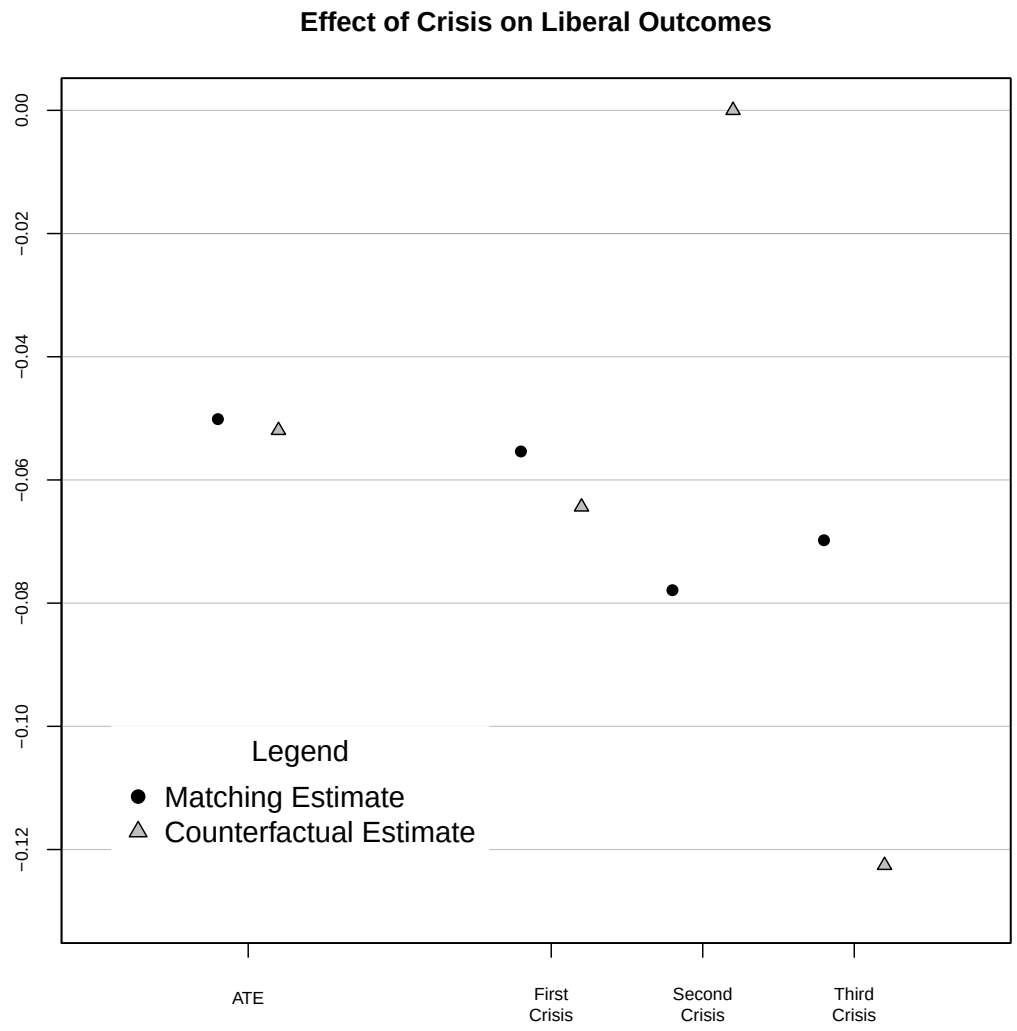

Figure 3.5: Estimated Effects of Crisis on Case Outcomes via Matching in the Supreme Court of India

Following data collection, I conducted empirical analyses to test whether crisis impacted court outcomes. Traditional logistic regression suggested crisis did in fact decrease outcomes favoring the accused by about 4%. I also used matched case analysis to estimate this effect. Matched cases analysis begins with specifying a set of confounding variables over which cases are matched. Cases are split into treated and control groups. For this analysis, the treated cases were the ones decided during crisis and control cases were decided during periods of non-crisis. The result of the matching procedure is a matched dataset where treated cases look as similar as possible to control cases. The effect of crisis can be calculated directly from the matched dataset or additional modeling may be performed to adjust for any remaining imbalance. I calculated the effect of crisis using both methods. The results from matched case analysis was strikingly similar to the traditional analysis, giving support to the conclusion that crisis does in fact decrease liberal outcomes in criminal appeals cases in the Supreme Court of India.

Chapter 4

The Future of Research on Crisis and the Courts

A growing body of research suggests that during times of war and national crisis, the courts become more conservative especially in the areas of civil liberties. This research is predicated on the assumption that when crisis strikes, governments enact policies to strengthen national security and promote public safety and stability within their borders — policies that ultimately restrict previously enjoyed civil rights and liberties. When these policies clash with civil liberties, claimants take their grievances to the courts. The courts are then forced to perform a balancing act, weighing the civil liberties claims of the individual against the government's interest in restoring order. According to the crisis thesis, the courts similarly become more restrictive of civil liberties during crisis, resulting in fewer outcomes favoring civil liberties claimants and criminal defendants.

Currently there is no single explanation for why the preferences of judges and ultimately, courts, move to the right on civil liberties. Various accounts of the crisis thesis credit deference to the executive branch during crisis which could result from a desire to present a unified front to a common enemy, acknowledgment of the executive's constitu-

tional role and practical advantages in carrying out foreign policy, or recognition of the executive's expertise with national security interests. Or perhaps judges recognize the limited role for courts in national security decision making. The 'deference' arguments suggest that if crisis impacts judicial outcomes at all, the effects should be most readily apparent in a small subset of cases, namely, those involving war, national security interests, or executive discretion. But recent empirical studies and the analysis presented in this project suggest the impact of crisis is felt in a much broader set of civil rights and liberties cases.

In this project, I focused attention on crisis decision making in the United States Supreme Court and the Supreme Court of India. First I asked whether the findings from previous studies hold true for outcomes in the U.S. Supreme Court following the 9/11 crisis. Previous empirical research has shown that crisis decreases the probability of obtaining outcomes that favor civil liberties claimants. But the largest of these studies reported a curious finding for the 2001 term of the U.S. Supreme Court. The 9/11 crisis appeared to increase the number of liberal outcomes. The authors still conjectured that if the U.S. became involved in a long war on terrorism, we would see a conservative shift in the preferences of the Court. In order to test this hypothesis, I restricted the analysis to the last Rehnquist natural court beginning with the appointment of Associate Justice Stephen Breyer on August 3, 1994, and ending with the death of Chief Justice William H. Rehnquist on September 28, 2005. This more narrow window of analysis also provided an important control for the ideology of the judges and changes in precedent over long periods of the Court's history — issues that were present in previous studies. Previous research used mean court ideology as a control, but since the primary question is whether preferences of the court and judges change during crisis, including such a measure introduces an endogeneity problem.

Consistent with previous studies and the prevailing accounts of the crisis thesis, I

looked at all civil liberties cases. But, unlike previous studies, I disaggregated the effects of crisis for criminal appeals cases and non-criminal civil liberties cases. This modeling decision allowed for the possibility that effects of crisis may manifest differently in the two distinct issue domains. I used multiple modeling techniques including traditional logistic regression, matched case analysis, and counterfactual analysis to estimate the causal effects of crisis on court outcomes. The results provide additional support for the crisis thesis and confirm the hypothesis regarding the effects of a sustained war on terrorism. Crisis decreased support for civil liberties claimants and criminal defendants during the years immediately following 9/11, but these effects were short-lived. The analyses suggest crisis decreased liberal outcomes during the 2001 and 2002 terms of the Supreme Court, but by the 2003 and 2004 terms, the effects of crisis appeared to dissipate. The broader implication of this finding suggests that the Court returned to a business-as-usual mode of decision making before any cases related to 9/11 or arising after 9/11 made it to the Court's docket.

I also set out to extend research on crisis decision making by courts by asking whether the crisis thesis could be generalized beyond the American judicial context. National crisis is not a local phenomenon and it stands to reason that foreign governments, when facing crisis, respond by strengthening security measures and restricting personal liberties. We might then assume that foreign high courts also respond to crisis. In fact, one could argued that many foreign high courts, especially those lacking the particular protections against executive and or political pressure as the U.S. Supreme Court, will be influenced to an even greater degree by crisis.

Empirical studies of foreign high courts are scarce and high quality sources of data are not readily available. For this analysis, I chose to focus on the Supreme Court of India. This court shares a number of features with the U.S. Supreme Court such the power of judicial review, a broad jurisdiction including both appellate and original jurisdiction,

and other key features that provide judges with political cover and allows the Court to operate with a high degree of judicial independence. The Supreme Court of India also maintains a repository of information on cases decided by the Court since 2000, making it possible to collect a rich dataset for analytical work. Information that was readily available included the type of case (criminal appeal, civil appeal, etc.), the date of judgment, a list of petitioners and respondents, a list of participating judges, head notes, and specific acts or laws referred to in the Court's decision. I chose to focus on criminal appeals cases. This focus provided tighter control over the range of issues involved in the cases and made it possible to code a number of other interesting case characteristics much more efficiently.

Data collection on this scale is complex and the probability of human error is great. Many researchers have turned to automated methods for data collection on the web and applied human social cultural behavioral modeling efforts champion automated routines to mitigate human error and prove sustainability of ongoing research efforts. I used automated and semi-automated routines to collect, clean, and code a new dataset of Indian Supreme Court cases. I developed two custom software applications to automatically crawl the Supreme Court's website and scrape a subset of cases into tables and individual text files. The tables included meta-information for each case such as the decision date and title of the case. The text files included case summaries, head notes, and when possible, excerpts of written opinions. The data were all publicly available and the end results were no different than what would have been expected if a human had hand copied each page — of course except for the dramatic reduction in human hours needed to complete the task.

Once data collection was completed, I reviewed the text from approximately 25% of the scraped files. During this qualitative review, I noted specific language in the text used to indicate case outcomes and to identify sub-issues. The language used to indicate case outcomes was quite specific and generally explicitly stated whether the Court held in

favor of the petitioner or respondent. Regular expression matching used to code outcomes of cases based on these identified phrases. Sub-issues were identifiable by frequent use of keywords and a hybrid approach was used to assign sub-issues to individual cases. This hybrid approach involved regular expression matching paired with a text classification algorithm based on the term frequency-inverse document frequency framework. The resulting dataset contained 1,389 fully coded criminal appeals cases.

The next step for this analysis was coding the spans of crisis for India. I used "ground truth data" to determine periods of international crisis in India. This ground truth data was hand-coded from multiple sources and is currently being used by the World Integrated Crises Early Warning System (WICEWS) which is a large-scale Department of Defense program of the Office of Naval Research. WICEWS is designed to provide early warnings of political instability such as insurgency, rebellion, international crisis, ethnic religious violence, and domestic political conflict. WICEWS is currently deployed at STRATCOM, PACOM, and SOUTHCOM and is being used by both the State Department and CIA.

The results from the empirical analysis on the Supreme Court of India suggest the crisis thesis is generalizable beyond the American judiciary. Crisis decreased liberal outcomes in criminal appeals cases across three separate periods of crisis. Crisis decision making is not peculiar to American courts. The broader implications of my research imply that theories about judicial behavior have merit for understanding decision making in foreign high courts as well. This leads me to ask what other theories of judical behavior could be applied to the Court of India.

In this project, I began work to disaggregate the effects of crisis on U.S. Supreme Court outcomes by issue areas, time, and individual judges. The results indicate that crisis does not affect all issue areas or judges equally and the effects are time-dependent. While I am satisfied with the results from this analysis, I recognize that civil liberties, as a class of cases, still represents a large number of legal issues and questions ranging from personal

liberties like freedom of speech and association to protections against unlawful searches and seizures. Crises are varied and the threats to the nations are varied. Likely, the range of civil liberties that come under fire vary from one crisis to the next and additional empirical work could take a nature of the times approach to consider the differential impacts of crisis on our liberties.

The collection and validation of a new data source for the Supreme Court of India was a major accomplishment, but this data too can be enhanced and expanded with a carefully managed research agenda. One planned enhancement to the dataset will be the addition of one or more variables indicating the specific laws referenced in court opinions. This enhancement can be accomplished using semi-automated regular expression matching. The process requires the development of a codebook of all laws to be included in the matching procedure and applying a regular expression matching algorithm to identify whether a particular case references any of the identified laws.

In addition, an expansion of the Supreme Court of India dataset is possible by changing the focus to a different case type, civil appeals cases for example. New cases can be added to the dataset based on case type, participating judges, year of the decision, or other keyword indicators. The Supreme Court of India website also has stated its intention to make full written decisions available online in a machine readable format sometime in the near future. The addition of these full texts will make it possible to accurately code a wide range of issues and shift the focus toward individual judges' voting behavior opening the door to testing many more theories of judicial behavior in the Supreme Court of India.

This project highlighted informational and technological advances that make it possible to collect and code new data sources efficiently, accurately, and in a timely manner. In the age of information, more and more governmental bodies are publishing vast amounts of data online and these tools can be used to quickly retrieve and repackage raw data for public consumption. The Supreme Court of the Philippines for example is currently

publishing a huge quantity of its decisions online and the methods outlined in this project could be used to make a new dataset of that Court's work. The future of judicial scholarship and scholarship on foreign judicial bodies in particular is indeed bright.

Appendix A

Appendix to Chapter 2

A.1 U.S. Rally Effects

Table A.1: U.S. Rally Effects Since World War II

President	Rally Effect	Duration
Roosevelt	Pearl Harbor (December 1941)	30 weeks
Truman	Truman Doctrine Proposed (March 1947)	36+ weeks
Eisenhower	Atoms for Peace Speech (December 1953)	20 weeks
Eisenhower	Indochina Truce Signed (July 1954)	6 weeks
Eisenhower	Geneva Summit (December 1959)	5 weeks
Kennedy	Cuban Missile Crisis (November 1962)	31 weeks
Johnson	Halts Bombing of North Vietnam (March 1968)	19 weeks
Nixon	Vietnamization Speech (November 1969)	15 weeks
Nixon	Vietnam Peace Agreement (January 1973)	15 weeks
Ford	Mayaguez Incident (May 1975)	25 weeks
Carter	Hostages Seized in Iran (November 1979)	16 weeks
George H.W. Bush	Iraqi Invasion of Kuwait (August 1990)	8 weeks
George H.W. Bush	Desert Storm begins (January 1991)	41 weeks
George W. Bush	Terrorist Bombing (September 2001)	35+ weeks

David W. Moore, *Bush Job Reflects Record "Rally" Effect*.[28]

[28]These rally effects were published on September 18, 2001 at `http://www.gallup.com/poll/4912/`

A.2 U.S. Supreme Court Civil Liberties Cases

Table A.2: U.S. Supreme Court Civil Liberties Cases by Term

	Criminal Procedure	Civil Liberties	First Amendment	Due Process	Privacy	Attorneys
1994	17	10	8	2	1	1
1995	18	7	5	5	1	0
1996	16	16	5	5	4	0
1997	25	17	2	4	0	0
1998	16	18	2	4	0	1
1999	27	9	7	1	3	0
2000	21	12	6	5	1	1
2001	15	13	8	3	3	1
2002	14	13	6	2	2	0
2003	24	7	4	1	4	2
2004	20	12	6	6	0	0

bush-job-approval-reflects-record-rally-effect.aspx.

Appendix B

Appendix to Chapter 3

B.1 Article 356, Constitution of India

356. Provisions in case of failure of constitutional machinery in States.

1. If the President, on receipt of a report from the Governor of a State or otherwise, is satisfied that a situation has arisen in which the Government of the State cannot be carried on in accordance with the provisions of this Constitution, the President may by Proclamation

   (a) assume to himself all or any of the functions of the Government of the State and all or any of the powers vested in or exercisable by the Governor or any body or authority in the State other than the Legislature of the State;

   (b) declare that the powers of the Legislature of the State shall be exercisable by or under the authority of Parliament;

   (c) make such incidental and consequential provisions as appear to the President to be necessary or desirable for giving effect to the objects of the Proclamation, including provisions for suspending in whole or in part the operation of any

provisions of this Constitution relating to any body or authority in the State:

Provided that nothing in this clause shall authorise the President to assume to himself any of the powers vested in or exercisable by a High Court, or to suspend in whole or in part the operation of any provision of this Constitution relating to High Courts.

2. Any such Proclamation may be revoked or varied by a subsequent Proclamation.

3. Every Proclamation under this article shall be laid before each House of Parliament and shall, except where it is a Proclamation revoking a previous Proclamation, cease to operate at the expiration of two months unless before the expiration of that period it has been approved by resolutions of both Houses of Parliament:

   Provided that if any such Proclamation (not being a Proclamation revoking a previous Proclamation) is issued at a time when the House of the People is dissolved or the dissolution of the House of the People takes place during the period of two months referred to in this clause, and if a resolution approving the Proclamation has been passed by the Council of States, but no resolution with respect to such Proclamation has been passed by the House of the People before the expiration of that period, the Proclamation shall cease to operate at the expiration of thirty days from the date on which the House of the People first sits after its reconstitution unless before the expiration of the said period of thirty days a resolution approving the Proclamation has been also passed by the House of the People.

4. A Proclamation so approved shall, unless revoked, cease to operate on the expiration of a period of six months from the date of issue of the Proclamation: Provided that if and so often as a resolution approving the continuance in force of such a Proclamation is passed by both Houses of Parliament, the Proclamation shall, unless revoked, continue in force for a further period of six months from the date on

which under this clause it would otherwise have ceased to operate, but no such Proclamation shall in any case remain in force for more than three years: Provided further that if the dissolution of the House of the People takes place during any such period of six months and a resolution approving the continuance in force of such Proclamation has been passed by the Council of States, but no resolution with respect to the continuance in force of such Proclamation has been passed by the House of the People during the said period, the Proclamation shall cease to operate at the expiration of thirty days from the date on which the House of the People first sits after its reconstitution unless before the expiration of the said period of thirty days a resolution approving the continuance in force of the Proclamation has been also passed by the House of the People: Provided also that in the case of the Proclamation issued under clause (1) on the 11th day of May, 1987 with respect to the State of Punjab, the reference in the first proviso to this clause to three years shall be construed as a reference to five years.

5. Notwithstanding anything contained in clause (4), a resolution with respect to the continuance in force of a Proclamation approved under clause (3) for any period beyond the expiration of one year from the date of issue of such Proclamation shall not be passed by either House of Parliament unless —

   (a) a Proclamation of Emergency is in operation, in the whole of India or, as the case may be, in the whole or any part of the State, at the time of the passing of such resolution, and

   (b) the Election Commission certifies that the continuance in force of the Proclamation approved under clause (3) during the period specified in such resolution is necessary on account of difficulties in holding general elections to the Legislative Assembly of the State concerned:

Provided that nothing in this clause shall apply to the Proclamation issued under clause (1) on the 11th day of May, 1987 with respect to the State of Punjab.

B.2 Judges of the Supreme Court of India

Table B.1: Judges of the Supreme Court of India: 2000 to Present Court

Justice	Assumed Office	End of Term
B. Sudershan Reddy	1/12/1946	7/7/2011
S.B. Majmudar	9/19/1994	8/19/2000
G.T. Nanavati	3/6/1995	2/16/2000
S. Saghir Ahmad	3/6/1995	6/30/2000
S.P. Kurdukar	3/29/1996	1/15/2000
K.T. Thomas	3/29/1996	1/29/2002
D.P. Wadhwa	3/21/1997	5/4/2000
M. Jagannadha Rao	3/21/1997	12/1/2000
M. Srinivasan	9/25/1997	2/25/2000
Ajay Prakash Misra	12/4/1997	8/31/2001
S.S.M. Quadri	12/4/1997	4/4/2003
(Continued on next page. . .)		

Judges of the Supreme Court of India (continued)

Justice	Assumed Office	End of Term
D.P. Mohapatra	12/9/1998	8/2/2002
U.C. Banerjee	12/9/1998	11/17/2002
M.B. Shah	12/9/1998	9/24/2003
R.P. Sethi	1/8/1999	7/6/2002
N. Santosh Hegde	1/8/1999	6/15/2005
S.N. Phukan	1/28/1999	3/31/2002
Doraiswamy Raju	1/28/2000	7/1/2004
Ruma Pal	1/28/2000	6/2/2006
Shivaraj V. Patil	3/15/2000	1/11/2005
S.N. Variava	3/15/2000	11/7/2005
Brijesh Kumar	10/19/2000	6/9/2004
B.N. Agrawal	10/19/2000	10/15/2009
P. Venkatarama Reddi	8/17/2001	8/9/2005
Ashok Bhan	8/17/2001	10/2/2008
Arijit Pasayat	10/19/2001	5/10/2009
B.P. Singh	12/14/2001	7/8/2007
D.M. Dharmadhikari	3/5/2002	8/13/2005

(Continued on next page. . .)

Judges of the Supreme Court of India (continued)

Justice	Assumed Office	End of Term
H.K. Sema	4/9/2002	6/1/2008
Arun Kumar	10/3/2002	4/11/2006
B.N. Srikrishna	10/3/2002	5/20/2006
S.B. Sinha	10/3/2002	8/8/2009
AR. Lakshmanan	12/20/2002	3/21/2007
G.P. Mathur	12/20/2002	1/19/2008
A.K. Mathur	6/7/2004	8/7/2008
C.K. Thakker	6/7/2004	11/10/2008
P.K. Balasubramanyan	8/27/2004	8/27/2007
P.P. Naolekar	8/27/2004	6/29/2008
Tarun Chatterjee	8/27/2004	1/14/2009
Altamas Kabir*	9/9/2005	7/18/2013
R.V. Raveendran	9/9/2005	10/15/2011
Dalveer Bhandari	10/28/2005	4/27/2012
Lokeshwar Singh Panta	2/3/2006	4/23/2009
D.K. Jain	4/10/2006	1/24/2013
Markandey Katju	4/10/2006	9/19/2011

(Continued on next page. . .)

Judges of the Supreme Court of India (continued)

Justice	Assumed Office	End of Term
V.S. Sirpurkar	1/12/2007	8/21/2011
H.S. Bedi	1/12/2007	9/4/2011
P. Sathasivam	8/21/2007	4/26/2014
G.S. Singhvi	11/12/2007	12/11/2013
Aftab Alam	11/12/2007	4/18/2013
J.M. Panchal	11/12/2007	10/5/2011
Mukundakam Sharma	4/9/2008	9/17/2011
Cyriac Joseph	7/7/2008	1/27/2012
R.M. Lodha	12/17/2008	9/27/2014
H.L. Dattu	12/17/2008	12/2/2015
A.K. Ganguly	12/17/2008	2/3/2012
Balbir Singh Chauhan	5/11/2009	7/1/2014
Deepak Verma	5/11/2009	8/28/2012
A.K. Patnaik	11/17/2009	6/2/2014
T.S. Thakur	11/17/2009	1/3/2017
K.S. Panicker Radhakrishnan	11/17/2009	5/14/2014
Surinder Singh Nijjar	11/17/2009	6/6/2014

(Continued on next page. . .)

Judges of the Supreme Court of India (continued)

Justice	Assumed Office	End of Term
Swatanter Kumar	12/18/2009	12/30/2012
Chandramauli Kumar Prasad	2/8/2010	7/14/2014
H.L. Gokhale	4/30/2010	3/9/2014
Gyan Sudha Misra	4/30/2010	4/27/2014
Anil R. Dave	4/30/2010	11/18/2016
Sudhansu Jyoti Mukhopadhaya	9/13/2011	3/14/2015
Ranjana Prakash Desai	9/13/2011	10/29/2014
Jagdish Singh Khehar	9/13/2011	8/27/2017
Dipak Misra	10/10/2011	10/2/2018
Jasti Chelameswar	10/10/2011	6/22/2018
Fakkir Mohamed Ibrahim Kalifulla	4/2/2012	7/22/2016
Ranjan Gogoi	4/23/2012	Not Set
Madan Bhimarao Lokur	6/4/2012	12/30/2018

Source: http://supremecourtofindia.nic.in/judges/judges.htm.

*Asterisk denotes the current Chief Justice.

B.3 High Courts Judicial Database

Table B.2: Coverage of the High Courts Judicial Database

Country	Court	Time Period
Australia	High Court	1969-2003
Canada	Supreme Court	1969-2003
India	Supreme Court	1970-2000
Namibia	Supreme Court	1990-1998
Philippines	Supreme Court	1970-2003
South Africa	Supreme Court of Appeal	1970-2000
South Africa	Constitutional Court	1995-2000
Tanzania	Court of Appeal	1983-1998
United Kingdom	Judicial Committee, House of Lords	1970-2002
United States	Supreme Court	1953-2005
Zambia	Supreme Court	1973-1997
Zimbabwe	Supreme Court	1989-2000

B.4 Sample Text from Case ID 25837

25837

Date of Judgement:28-May-2009

Case Number: Appeal (crl.) 786-789 of 2003

Judge Name:MUKUNDAKAM SHARMA (J), B.S. CHAUHAN (J)

Petitioner Name:STATE OF PUNJAB

Respondent Name:MANJIT SINGH AND OTHERS

Head Notes:

Dismissing the appeals, the Court HELD: 1. With regard to the quantum of punishment to be awarded to persons found guilty of offences dealt with in the IPC, the Code of Criminal Procedure confers a wide discretion on the court in the matter of awarding appropriate punishment by prescribing the maximum punishment and in some cases both the maximum as well as the minimum punishment for the offence. Though no general guidelines are laid down in the Code for awarding punishment, generally the

judicial discretion of the court is guided by the principle that the punishment should be commensurate with the gravity of the offence having regard to the aggravating and mitigating circumstances vis–vis an accused in each case. In such situation, the obligation of the court in making the choice of death sentence for the person who is found guilty of murder becomes more onerous indeed. [Para 12] [871-E-H; 872-A] Bachan Singh v. State of Punjab (1980) 2 SCC 684; Machhi Singh v. State of Punjab (1983) 3 SCC 470, relied on. Om Prakash v. State of Haryana (1999) 3 SCC 19, referred to. 2. On the question of awarding the sentence for the offences for which life imprisonment as well as the death sentence is prescribed, sub-section (3) of Section 354 CrPC enjoins that in the case of sentence of death, special reasons for such sentence shall be stated. Whether the case is one of the rarest of the rare cases is a question which has to be determined on the facts of each case. The choice of the death sentence has to be made only in the rarest of the rare cases and that where culpability of the accused has assumed depravity or where the accused is found to be an ardent criminal and menace to the society; where the crime is committed in an organized manner and is gruesome, cold-blooded, heinous and atrocious; and where innocent and unarmed persons are attacked and murdered without any provocation. [Paras 13 and 17] [872-A-B; 873-E-G] Allauddin Mian v. State of Bihar (1989) 3 SCC 5, relied on. 3. Both the respondents behaved in a most cruel manner, killed four persons while they were asleep. Three, out of the four deceased persons, were murdered within the precincts of a Gurdwara. But, there were certain mitigating circumstances in the case which cannot be lost sight of. Both the respondents, as is disclosed from the records, had illicit relationship with the third accused, who was wife of one of the deceased and when she narrated her woes and the harassment, both the accused persons, lost their balance and acted in a cruel manner by entering into the house of deceased in the dead night and killing in the house and other three sons in the Gurdwara. Thereafter, they also gave threat to everybody outside the house by stating that they have killed those persons and, therefore, no one

should dare to come near them. This behaviour on the part of the accused- respondents would show that they acted in the manner being driven more by infatuation and also being devoid of their sense on coming to know about the ill treatment meted out to 'BK'. Though the act of the accused is a gruesome one but it was a result of human mind going astray. No doubt, they acted in a ghastly manner for which, they were adequately punished. The High Court gave its reasons for not awarding the death sentence. Keeping in view entire facts and circumstances of the case, the reasons given by the High Court for altering and converting capital sentence to a sentence of life were found to be cogent and reasonable. Therefore, the life sentence awarded to all the three accused persons by the High Court stands upheld. [Para 19] [874-A-G] Case Law Reference: (1999) 3 SCC 19 referred to Para 9 (1980) 2 SCC 684 relied on Para 11 (1983) 3 SCC 470 relied on Para 11 (1989) 3 SCC 5 relied on Para 16 CRIMINAL APPELLATE JURISDICTION : Criminal Appeal Nos. 786-789 of 2003. From the Judgment & Order dated 12.02.2001 of the High Court of Punjab & Haryana at Chandigarh in Murder Reference No. 4 of 2000, Criminal Appeal No. 262-DB of 2000, 271-DB of 2000 and Criminal Appeal No. 272-DB of 2000. Kuldip Singh, R.K. Pandey and H.S. Sandhu for the Appellants.

Act:

Sentence/Sentencing: Death sentence - Alteration of, to life imprisonment - Justification of - On facts, held: Both the accused persons had illicit relationship with the third accused, who was wife of one of the deceased - The accused lost their balance when she narrated her woes and the harassment caused to her by her husband and sons - They entered the house and killed husband of third accused and thereafter went to Gurdwara and killed three sons - This behaviour on part of accused showed that they acted in the manner being driven more by infatuation and also being devoid of their sense on coming to know about the ill treatment meted out to the third accused - Though act was gruesome but it was result of human mind going astray, for which, they were adequately punished -

Life sentence awarded to all the three accused persons by High Court upheld - Code of Criminal Procedure, 1973 - s.354(3) - Penal Code, 1860 - s.302 r.w. s.120B. Prosecution case was that the accused persons developed illicit relations with 'BK', the third accused. Her husband and sons did not like this and restrained accused persons from coming to their house. 'BK' did not like this and told to the accused persons about maltreatment meted to her. On fateful day, the accused persons killed her husband and sons. The trial court convicted them under ss.302/34 IPC and awarded death sentence. On appeal, High Court altered the death sentence to life sentence. Hence appeals by the State challenging alteration of sentence.

`Court Name: Supreme Court`

`Appears in Collections: SCI Judgement`

B.5 International Crisis in India

B.5.1 U.S. State Department: Background Note on India

The following excerpts were obtained from the U.S. State Department website country notes on India at `http://www.state.gov/r/pa/ei/bgn/3454.htm`.

- "On May 11 and 13, 1998, this government conducted a series of underground nuclear tests, spurring U.S. President Bill Clinton to impose economic sanctions on India pursuant to the 1994 Nuclear Proliferation Prevention Act."

- "The Kargil conflict in May-July 1999 and an attack by terrorists on the Indian parliament in December 2001 led to increased tensions with Pakistan."

- "In late November 2008, terrorists killed at least 164 people in a series of coordinated attacks around Mumbai. Prime Minister Singh promised a thorough investigation

and Home Minister Chidambaram pledged significant reforms to improve Indias counterterrorism agencies."

B.5.2 New York Times

- May 15, 1998. Nuclear Anxiety: The Tests; Monitors Picked Up Only 1 of 5 India Blasts. Only one of the five nuclear tests that India announced this week was detected by the thousands of seismometers around the world set up to track earthquakes and atomic blasts, renewing a debate among experts about how effectively a test ban treaty can be monitored...The Clinton Administration has championed not only the test ban treaty, which it signed in 1996, but the construction of a global network of seismometers to achieve the monitoring goal. The system costs hundreds of millions of dollars to build and run...The vivid demonstration of the system's weakness is likely to stir a further debate, in military and diplomatic circles, over the usefulness of a policeman who can catch only 1 in 5 offenders, and perhaps of the law giving the policeman such authority.

- May 15, 1998. Nuclear Anxiety: The Subcontinent; Pakistan is Under Growing Pressure Not to Respond to India with Atom Test. "India's actions, which pose an immediate and grave threat to Pakistan's security, will not go unanswered," a senior Pakistani diplomat, Munir Akram, said today at a United Nations disarmament conference in Geneva...Domestic political pressures make it exceedingly difficult for Mr. Sharif to choose that course. Emotion-charged demonstrators have taken to the streets in several cities to demand that the Government reply to India's nuclear tests with tests of its own.

- May 29, 1998. Nuclear Anxiety: The Blast; Explosion is Detected by U.S. Scientists. A lone nuclear signal from deep beneath the earth in Pakistan was detected by the

global network of seismometers that track earthquakes and underground atomic tests, American scientists said yesterday. Pakistan said it had exploded five nuclear devices. That is the total number India said it had detonated in tests on May 11 and 13... "There's no question that they have a weapon with a militarily important yield," said Ray E. Kidder, a former atom bomb designer at the Lawrence Livermore National Laboratory in California.

- June 29, 1998. World New Briefs; Pakistan Ties Test Ban to a Kashmmir Solution.

  > Pakistan today linked signing a nuclear test-ban treaty to a resolution of its dispute with India over Kashmir, where fresh shelling was reported to have killed at least eight people... "The nuclearization of very large armies on the subcontinent is a direct result of the Kashmir dispute," he said. Once the Kashmir issue is settled, he added, "the necessity to maintain large armies or nuclear weapons or delivery systems goes away."... Military officials here said Indian artillery and mortar rounds hit a village today, killing eight people and critically wounding three. Earlier reports had put the death toll at 11. Pakistani officials said they returned the fire.

- December 17, 2001. India Says Arrests Link Militants in Pakistan to Attack. The police here announced today that they had arrested four people who admitted under "intensive interrogation" that they conspired in the attack last Thursday on the Indian Parliament. The suspects also identified two anti-Indian militant groups operating openly in Pakistan that had organized the plot, the police said.

- June 4, 2002. India Tones Down War Talk as U.S. Presses Pakistan. After a week of blunt American pressure on Pakistan, senior Indian officials seemed to pull back a bit from the brink of war today and said it would take more time to see whether

Pakistan stopped the infiltration of Islamic militants into India. "Diplomacy has succeeded in averting a crisis so far," one senior official said. "I see the possibility of war receding unless there is a major provocation."

- June 11, 2006. *Accounts Diverge On Shots Fired on Indian Border*. Indian and Bangladeshi troops exchanged heavy fire along the border that divides the usually friendly countries, officials said on Saturday, though the two sides gave different accounts of the clash. Bangladesh accused India of an unprovoked attack. But a top Indian official said the Friday night skirmish, the most serious in nearly two months, occurred after a Bangladeshi smuggler had been shot dead by India's Border Security Force..."The situation is still tense, and we are trying to communicate with the Indians for a meeting with a view to stopping further escalation of the incident," the official said."

B.5.3 CNN World News

- May 12, 1998. CIA Caught Off Guard on India Nuclear Test. This colossal failure of our nations intelligence gathering could set off a nuclear arms race in Southeast Asia, Shelby said in a statement...Our failure to detect this shows that India did a good job of concealing their intentions, while we did a dreadfully inadequate job of detecting those intentions, Shelby said.

B.5.4 BBC News

- India-Pakistan: Troubled Relations 2001.

  Tension along the line of control continued. The worst fighting for more than a year broke out in October as India, which continued to condemn

Pakistan for cross-border terrorism, started shelling Pakistani military positions. October saw a devastating attack on the Kashmiri assembly in Srinagar in which 38 people were killed. After the attack, the chief minister of Indian-administered Kashmir, Farooq Abdullah, called on the Indian government to launch a war against militant training camps across the border in Pakistan. On 13 December, an armed attack on the Indian parliament in Delhi left 14 people dead. India again blamed Pakistani-backed Kashmiri militants. The attack led to a dramatic build-up of troops along the Indo-Pakistan border, military exchanges and raised fears of a wider conflict.

- May 9, 2003. *Slow Steps to India-Pakistan Peace*. When Prime Minister Atal Behari Vajpayee climbed up the steps onto the platform at Srinagar in Kashmir on 18 April to address the large crowd that had gathered, he knew he was taking a huge risk. Tucked into his speech was the offer of the ”hand of friendship” to Pakistan. He did not know how Pakistan would react; he did not know how many of his own government would react, they had not been told about this dramatic gesture. It has been described by sources in the American embassy in Delhi as an ”act of statesmanship” and a ”huge gamble”. But it is a gamble that has paid off - so far.

- April 17, 2005. *India-Bangladesh Border Shooting*. An Indian border police official has been killed after an exchange of fire between Indian and Bangladeshi soldiers along their border. The fighting broke out after Bangladeshi border guards detained an Indian who they say had crossed into their territory. But India says the man was on Indian territory when members of the Bangladesh Rifles allegedly dragged him away. The incident took place in the border between the Indian state of Tripura and the Bangladesh district of Comilla. India has built a fence along the border but a

senior Indian Border Security Force (BSF) official told the BBC that it was located well within Indian territory. As a result, the official Suresh Kumar Dutt said, many Indian villagers now find their fields are located on the other side of the fence.

- August 19, 2005. *Bangladesh-India Border Firing*. Indian border guards said they opened fire in protest at construction of an embankment on the Mahananda river...Indian troops from the Border Security Force (BSF) opened fire after more than 300 Bangladeshi construction workers began work on a structure on the Mahananda river, Indian officials said...Bangladesh and India enjoy generally friendly relations but tensions have increased since India began fencing off its border to keep out what it describes as illegal immigrants and "cross-border insurgents".

- December 10, 2008. *Are Mumbai Attacks a Chance for Peace?* If Lashkar-e-Toiba is indeed responsible for the attacks - as Indian authorities claim and Pakistan denies - it will be the second time that the group has single-handedly put the two countries on a war footing. In 2002 each mobilised one million men for nearly a year after Lashkar attacked the Indian parliament. The attacks have led to rising public anger in India against Pakistan and right wing Pakistani jingoism against India, in which some have even called on the moderate President Asif Ali Zardari to go to war.

B.5.5 Reuters

- July 15, 2010. *Pakistan, India Seek to Revive Peace Talks*. Pakistani and Indian foreign ministers met on Thursday in an effort to revive peace talks broken off after the Mumbai assault, although no one is expecting any breakthrough given lingering distrust between the old rivals.

- September 29, 2010. *India Invites Pakistan Minister for Games, Talks*. India's foreign minister has invited his Pakistani counterpart to watch the Commonwealth Games,

which begins on Sunday, and said he hoped it could also give them a chance to carry forward their peace dialogue. The two sides are trying to improve ties that plummeted after the 2008 Mumbai attacks which killed 166 people and derailed a sluggish four-year-old peace process with Pakistan. Krishna and Qureshi's held peace talks in July and those ended in acrimony over the attacks, even though the dialogue itself is seen as a tentative step toward improving ties.

B.6 Outcomes and Issues Dictionary

Table B.3: Dictionary for Assigning Case Outcomes and Specific Issues

Search Term	Outcome or Issue
Allowing the appeal	Petitioner wins
Allowing the petition	Petitioner wins
Allowing the Writ appeal	Petitioner wins
Allowing the Writ petition	Petitioner wins
Allowing the Civil Appeal	Petitioner wins
Appellant .*is acquitted	Petitioner wins
Dismissing the appeal	Respondent wins
Dismissing the petition	Respondent wins
Dismissing the Writ appeal	Respondent wins
Dismissing the Writ petition	Respondent wins
Dismissing the Criminal Appeal	Respondent wins
conviction of appellant is upheld	Respondent wins
Partly allowing appeal	No clear winner
Partly allowing petition	No clear winner
Partly allowing Writ appeal	No clear winner
Partly allowing Writ petition	No clear winner
Disposing of the appeal	No clear winner
Disposing of the petition	No clear winner
Disposing of the Writ appeal	No clear winner
Disposing of the Writ petition	No clear winner
Disposing the petition	No clear winner
Answering the reference	Reference question
death penalty	Death penalty
death sentence	Death penalty
death punishment	Death penalty
terrorist	Terrorist Activity Act
dowry death	Dowry Prohibition Act

B.7 Criminal Appeals Categories for the Supreme Court of India

Table B.4: List of Criminal Appeals Case Subject Categories for the Supreme Court of India

Number	Subject
1401	Matters relating to capital punishment
1402	Matters relating to maintenance under Section 125 of Cr.P.C.
1403	Matters relating to harassment, cruelty to woman for dowry, dowry death, eveteasing, domestic violence etc.
1404	Matters relating to sexual harassment, kidnapping & abduction
1405	Matters relating to Prevention of Corruption Act
1406	Matters relating to Bank scams, cheating, forgery etc.
1407	Matters relating to Essential Commodities Act
1408	Criminal matters relating to State Excise Law
1409	Criminal matters relating to bail/interim bail/anticipatory bail and against suspension of sentence
1410	Criminal matters in which sentence awarded is up to five years
1411	Criminal T.P. Under Article 139(A)(1) of the Constitution of India
1412	Criminal T.P. Under Section 406 of the Cr.P.C.
1413	Criminal matters arising out of Securities Act, 1992.
1414	Criminal matters relating to Drugs and Cosmetics, NDPS Act
1415	Criminal matters relating to Food Adulteration
1416	Criminal matters relating to preventive detention, TADA/POTA & national security-COFEPOSA-SAFEMA
1417	Matters relating to SC & ST (Prevention of atrocities) Act, 1989; Untouchability (offences) Amendment & Misc. Provision Act, 1976.
1418	Others
1419	Scam matters other than relating to Banks
1420	Appeal under S. 2 of the Supreme Court enlargement of jurisdiction Act
1421	Police atrocities matters
1422	Matters relating to Foreign Exchange Regulation Act
1423	Matters challenging sentence till rising of the court and/or fine only
1424	Appeals u/s 10 of the Special Courts (Trial of Offences relating to transactions in Securities) Act, 1992.
1425	Appeals u/s 19 of the Terrorist and Disruptive Activities Act, 1987
1426	Matters filed by State against Acquittal
1427	Matters filed by complainant against Acquittal
1428	Matters under State Police Acts
1429	Matters for/against quashing of criminal proceedings
1430	Matters challenging prosecution under Income Tax Act
1431	Matters challenging prosecution under Negotiable Instruments Act
1432	Criminal matters relating to Central Excise & Salt Act, 1944
1433	Criminal matters relating to Customs Act, 1962
1434	Matters relating to Foreign Exchange Management Act (FEMA)
1435	Criminal appeals filed against the orders of various Tribunals

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