

Revisiting State Failure: Developing a Causal Model of State Failure Based Upon Theoretical Insight

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Developing a theoretically driven causal model of state failure is necessary if scholars are committed to improving the predictive power and forecasting ability of early warning models of state failure. Building upon the work of the State Failure Project¹ and earlier statistical models of state failure,² this study develops a causal model of state failure that is based upon a theoretical foundation that satisfies the parsimonious condition that policy forecasting models typically rely upon. The statistical model of state failure developed for this analysis extends the work of previous models by developing an alternative definition and measurement of state failure and introduces factors that are appropriate for making predictions and establishing causation.

When a state fails this process signifies that the governing structures have all collapsed. The occurrence of state failure is a unique phenomenon fraught with intricate complexities. State failure involves high levels of violence, physical insecurity, and complete chaos. For the citizen of a state experiencing failure, the situation is extremely perilous and frightening. Given the tremendous implications state failure has for human security, this analysis is interested in identifying a set of causal factors that are capable of predicting imminent state collapse.

There exist an array of literature devoted to understanding the phenomenon of state failure and collapse, comprised mostly of case study evaluations of various failed states across the globe.³ What is important about these case studies is that they explore the unique conditions that existed in states such as Somalia, Ethiopia, or Bosnia prior to their eventual collapse. This body of literature provides a rigorous examination of those unique factors that emerge as causal indicators of state collapse.

In addition to the case study literature, there exist studies that have generated statistical models of state failure.⁴ In the same vein of the case studies, these works establish a set of precursor conditions; comprised of political instability, high infant mortality rates, features of the polity, and other relevant institutional and situational factors capable of producing imminent state collapse.

While the existing bodies of literature represent an achievement in the area of predicting state failure by developing comprehensive statistical models of state failure, these studies are not without their weaknesses. The failure of earlier studies, notably those utilizing the statistical method, can be found in how these studies

constructed a measurement of state failure. More specifically, the limitations of earlier models of state failure can be attributed mainly to model misspecification as a result of a weak theoretical framework.

Building upon the work of the State Failure Project⁵ and earlier models of state failure⁶ this study develops a causal model of state failure that is based upon a theoretical foundation that satisfies the parsimonious condition that policy forecasting models typically rely upon. The statistical model of state failure presented in this analysis extends the work of previous models by developing an alternative definition and measurement of state failure, and introduces factors that are appropriate for making predictions and establishing causation.

Developing a theoretically driven causal model of state failure is necessary if scholars are committed to improving the predictive power and forecasting ability of early warning models of state failure. I argue that there is a way to improve upon earlier models of state failure without losing the parsimonious quality that is unique to these types of models.

The state failure model developed in this study avoids the errors of earlier models by moving beyond a standard logit analysis. Previous statistical models fail to capture the nuances of state failure in the real world because they approach state failure as a single event. This analysis treats state failure as the incidence of two stages, failing and failed. Therefore, this study isolates those factors that contribute to each stage. By doing this, I assign qualitative differences between each stage of collapse which allows for more precise predictions. This is important because policy makers are provided with a set of causal indicators for each stage of failure; therefore, they can direct resources to those states where failure is imminent.

To test these hypotheses, I estimate a multinomial logit model of state failure, which makes the distinction between the two stages of the process of failure. This model focuses on identifying the specific determinants of a failing and failed state. The results are consistent with several of the hypotheses.

The remainder of this study is divided into four sections. In the following section I present the argument and the hypotheses. Next I discuss the data, the statistical model and the operational indicators. The section that follows after is a presentation of the results. Finally, in the conclusion I discuss the implications of the analysis and make suggestions regarding future studies.

ARGUMENT AND HYPOTHESES

The Argument

Forecasting models dominate the research conducted in the public policy sector; and they are typically used by economists to predict the behavior of financial markets, and in the environmental and geological fields to determine the possibility that natural disasters will occur. The use of forecasting models to predict humanitarian emergencies is a new phenomenon though there are some instances where it has been done successfully.⁷ Despite the success of these works, the use of forecasting

models by social scientists is extremely rare. This is because forecasting models rely upon the assumption that forecasts remain accurate into the future when the causal structure also remains stable.⁸ In other words ‘any claim to accurate forecasts is also implicitly a claim about causal structure.’⁹ However, due to the type of events that forecasting models must predict, oftentimes proxy variables must be used (i.e., infant mortality) that are unable to make claims regarding causality. Variables such as rates of infant mortality, which is used in prior models of state failure, cannot hope to provide a causal foundation for evaluating the conditions that generate state failure.

Although policymakers acknowledge that forecasting models that do not rely upon a causal framework will eventually fail in their goal to predict events in the long term, the nature of the forecasting model is such that it oftentimes forces policymakers interested in prediction to overuse situational indicators as independent variables instead of relying upon explanatory variables derived from a causal theory. It is for that reason that social scientists tend to believe that the goals of forecasting models and causal models are not synonymous; therefore, forecasting models cannot give rise to causality.

The analysis of state failure as a testable concept emerged in the last 15 years, yet there remain limited studies, models, and methods to build upon. The most notable quantitative study is *The State Failure Project*,¹⁰ which ignited the discussion and study of state failure. *The State Failure Project* relies upon the use of a forecasting model to predict state failure and it includes three variables: degree of trade openness, infant mortality, and an indicator of democracy. The three variables used in the model do not rely upon an explicit theory which the authors readily admit due to their goals of ‘developing methods of risk assessment and early warning systems.’¹¹ The primary goals of *The State Failure Project* were to develop forecasting strategies, not causal models based upon theoretical assertions. Consequently, the final model is the best fit for the data.¹²

The goal of this study is to find support for the theory that state failure should be examined using a causal model. Therefore, it is imperative that we abandon the forecasting model estimated by *The State Failure Project*¹³ and focus on developing a causal model from which inferences can be drawn.

In addition to moving beyond forecasting models of state failure, this study also works toward refining the definition and measurement of state failure. The state failure literature defines state failure as either an absolute transition or according to procedural stages.¹⁴ With respect to the first definition, state failure either occurs or it does not. In these terms state failure represents this general concept that includes four very unique types of conflict (revolutionary war, ethnic war, adverse regime transitions, and genocide/politicide). The problem with this definition is that there are unique mechanisms that trigger the occurrence of each of these four types of conflict which are not taken into account. Consequently, state failure is a complex event that cannot be simplified to these terms.

According to the second definition, state failure is defined along four stages: weak state, failing state, failed state, collapsed state. While this definition represents an improvement upon the first, the problem with defining state failure in this manner is that these definitions cannot be applied to actual country cases. Previous models

of state failure illustrate that weak states exhibit characteristics similar to those of failing states, while collapsed states exhibit characteristics similar to those of failed states.¹⁵ In essence, this definition is entirely too specific and takes into account qualitative differences that simply do not exist in the real world.

Within the framework of this analysis, I argue the most appropriate definition of state failure is captured in two categories: failing and failed. This definition takes into account the unique causal mechanisms that are associated with each of the four types of conflict, yet at the same time can be generalized to actual country cases. More importantly, this definition can be operationalized in quantitative analysis, but is also applicable to qualitative analysis.

The remainder of this section builds upon the work of peace and conflict scholars and discusses the importance of predicting state failure utilizing causal factors. In the following discussion I develop the hypotheses and model framework that will be used to estimate the causes of state failure.

The Hypotheses

This study is based upon the assertion that political, economic, and social pressures all play a contributing role in the incidence of state failure. To develop hypotheses from this framework I need to consider the factors that lead to instability within a state and ultimately lead to the failure of the state.

Polity Feature. The first set of hypotheses considers the influence that polity features have on the nature of the state. I hypothesize that strong autocratic regimes, the presence of a corrupt state authority, and a difficult history of state development will have an impact on the occurrence of state failure.

The hypothesis concerning strong autocratic regimes develops out of the debate between Esty *et al.* in the *State Failure Task Force: Phase I Findings* and Rotberg *et al.* in *When States Fail*.¹⁶ Esty *et al.* argue that a declining democracy is correlated with state failure and that ‘partial democracies are indeed far more vulnerable to state failure types of crises than are either full democracies or full autocracies.’ Rotberg *et al.* dispute that finding by identifying partial democracies that are relatively strong when compared to full autocracies that are also failed states. From both studies it is clear that states that are ruled by autocratic governments are far more likely to fail than stable democracies. Yet what is not clear is whether or not strong autocracies are far more stable than partial democracies. Therefore, this hypothesis argues that states governed by partial democracies are far less vulnerable to state failure than full autocracies.

The logic behind the hypothesis that corrupt state leaders influence the occurrence of state failure is based upon the argument that the leadership of a state sets the tone for the state. If leaders are corrupt and ineffective then the state becomes susceptible to economic and political failure which eventually leads to the total collapse of the state. Evidence that the failure of the state leadership to properly manage their nation weakens the state and positions it for failure is provided in Rene Lemarchand’s analysis of the Democratic Republic of Congo (DRC).¹⁷ In *State*

Failure and State Weakness in a Time of Terror Lemarchand argues that the authority of the state can determine whether it will fail or not. He uses the DRC as an example and argues that the horrors of the Leopoldian system, Mobutu's brutally exploitive dictatorship, ineffective and predatory government leadership, the sheer oppressiveness of Belgian rule and the excesses of the successor state, have made it difficult for the DRC to survive. Lemarchand states that Mobutu himself must be seen as the determining agent behind the DRC's 'vertiginous descent into the abyss.'¹⁸ He further illustrates his point by stating that what set Mobutu apart from other neo-patrimonial rulers was his capacity to 'institutionalize kleptocracy at every level of the social pyramid and his unrivaled talent for transforming personal rule into a cult, and political clientelism into cronyism.'¹⁹

Lemarchand's study concludes that regime leadership plays a critical role in the success or failure of the state. In the case of the DRC, a neo-patrimonial, authoritative style of leadership that allows for pervasive corruption was the major cause of its failure.

Lemarchand's study primarily examines the executive, but state leadership is based upon both the executive and the legislature. In Reno's study of Sierra Leone he takes into account the role the legislative body played in the failure of the state.²⁰ Reno states that due to the actions of her leaders, conflict developed in Sierra Leone, yet it did not threaten the power of those whose actions generated the conflict.²¹ Instead, those political authorities used violence and insecurity in lieu of bureaucratic institutions to control their citizens. 'These techniques included manipulating access to remaining economic opportunities, instigating local tensions and factional divisions, and using disorder as a political instrument to divide potential challenges to their authority.'²²

In the absence of bureaucratic institutions, political authority in Sierra Leone was based upon controlling markets and manipulating access to economic opportunities. The state authority's capacity to privatize state assets played a key role in its ability to exercise authority and legitimacy. Yet eventually the state authority could only maintain a minuscule degree of strength in the presence of bureaucratic weakness, corruption, and economic scarcity. When the façade faded, the state authority's strategy to hang on to their position of power was based upon their ability to undermine the security of its citizens. Given the state's interest in creating a security dilemma, conflict became inevitable, which only hastened Sierra Leone's failure in the 1990s under the ineffective leadership of Stevens and the APC (All People's Congress).

Another key hypothesis of this analysis is based upon the argument that a difficult history of state development has significant implications for the health and viability of the contemporary state. Several studies dedicated to understanding post colonial African states acknowledge that many political scientists try to impose a concept of statehood based upon Max Weber's definition that is not appropriate given the context of ethnic and tribal identities unique to post colonial African nations.²³ Africa was never comprised of classically defined sovereign states that maintained a monopoly over the territory within their boundaries. Furthermore many colonial powers that established a presence in Africa made no effort to extend the administrative authority of the government beyond the capital city. 'In most cases, the colonial governments were little more than elementary bureaucracies with

limited personnel and finances and were more comparable to rural country fiefdoms in Europe than modern independent states.²⁴ After achieving independence, several African nations continued this trend and did little to extend the administrative authority of the government beyond the urban centers.

Consequently, considering Africa's historical background, Herbst argues that the failure to resuscitate failed states or prevent weak states from failing in Africa is the result of the international system's legitimization and recognition of several African nations, that were really never states to begin with.²⁵ However, the vast majority of reports and analytic studies that examine the state continue to use existing nation-states as their unit of analysis. Yet borders manufactured by colonial powers make the concept of statehood in Africa very difficult to achieve. Given that post-colonial Africa lacks a history of state development, it is very difficult for many contemporary states to create strong states. Many post-colonial African nations are experiencing episodes of state failure because they simply lack a blueprint. Thus, it is difficult for states that lack a history of prior state development to establish strong and effective state today because political and economic institutions necessary to promote state building were never cultivated in the past.

Post-colonial African nations are not the only states struggling to develop a state in the absence of a history of state organization. Colombia represents an enduring example of a state that continues to persist as a weak state because it never developed the necessary institutions to function as a modern state. 'Colombia began as a weak state and nothing was done for most of the 138 years of independence to reverse this situation.'²⁶ Rather than building a state that would be more equipped to address current and future problems, Colombian elites played what Barbara Geddes has called the 'politicians dilemma.'²⁷ They had to make a choice between their need for political survival (clientelism) and long-term interests in regime stability (state building). 'They chose survival, at the expense of the Colombian state.'²⁸

Protest and Dissident Behavior. The second set of hypotheses considers the influence that non-violent protest and dissident behavior have on the nature of the state. I hypothesize that the occurrence of strikes, demonstrations, and riots will have an impact on the incidence of state failure. This hypothesis is grounded in the argument that acts of protest destabilize the regime and the state and create a climate susceptible to failure. The presence of dissident behavior alone creates instability in a nation; however, repression of dissident behavior also destabilizes a nation because it directs important resources away from the populace to engage in the repression of dissident behavior and illustrates that the polity lacks the appropriate mechanisms to sustain order.²⁹ This analysis defines protest and dissident behavior as any type of defiant action aimed at the government but does not succeed in displacing the current regime. This definition includes strikes, demonstrations, and riots.

Proximity to a State in Crisis. The third hypothesis considers the influence that proximity to a state experiencing any type of conflict has on the nature of the state. When a protracted conflict develops in one state, it can destabilize an entire region.

Protracted conflicts have led to the collapse of entire regions such as the Horn of Africa, the Great Lakes Region (Africa), and the Middle East. The same phenomenon can be seen with state failure; when state failure occurs in a nation, neighboring nations are at risk for failure as well.

State failure is contagious. The risk of decline and collapse are significantly greater when your neighbor is a failed state. The civil war in Liberia hastened the collapse of Sierra Leone, and the flow of refugees generated by the conflict in Sierra Leone disrupted the already weak and unstable Guinean government. The same is true of the Democratic Republic of the Congo, which rapidly declined in the aftermath of the Rwandan genocide.

Economic Decline. The fourth hypothesis considers the influence that deteriorating economic conditions have on the nature of the state. In van de Walle's 'The Economic Correlates of State Failure'³⁰ he argues that poor macroeconomic policies can lead to the failure of the state until the state ceases to provide virtually any public goods, and state agents become entirely predatory through rent seeking and corruption.

Van de Walle's³¹ findings are applicable to this analysis because they are based upon the premise that when one group exclusively controls the economic resources they use them to manipulate power to promote their economic and political interests instead of providing public goods to citizens and promoting economic development. Sierra Leone represents a classic example of this type of behavior. The Creole dominated All People's Congress (APC) regime retained exclusive control of the economic resources, which led to an unequal distribution of the wealth. Consequently, economic insecurity ensued, which eventually contributed to the Revolutionary United Front's armed challenge to the APC regime and the collapse of Sierra Leone. This hypothesis is based upon the argument that when economic resources fail to reach the populace then economic insecurity is the natural result and the state begins to deteriorate.

RESEARCH DESIGN

The Data

The data used to conduct statistical analyses come primarily from *The State Failure Project: Phase III Findings* and represent a PCTS dataset.³² The dataset includes indicators of violent conflict, polity features, state failure events, natural disasters, and the economy for 195 countries from 1955 to 2000.³³ 'The data amassed [by the Task Force] are impressive with more than a thousand variables, each carefully collected and documented, and many with value added beyond what is available from other sources.'³⁴

In addition to *The State Failure Project: Phase III Findings*,³⁵ I also gather data regarding the polity and violent conflict events. The data collected on violence and features of the polity are based upon the work of Moore and Shellman.³⁶ The data measure 19 concepts of violent conflict events, economic decline, and polity instability and encompass the period from 1976 to 1995.

Unit of Analysis

The unit of analysis employed in this study is the country-year, which represents the country where an event occurred at a particular point in time; in this case the time unit is a year. There are a total number of 195 countries included in this study, although fewer than 195 countries appear in the dataset in any one year. This is because countries enter the dataset in 1955 or when they came into existence; countries remain in the dataset even after an episode of failure.³⁷ Consequently, while there are in fact 193 countries recognized in the world today, at various points in time nations were absorbed into another country or they seceded, therefore the data capture the various time periods where this occurred. For example, Germany, East Germany, and West Germany appear as three separate items at various time periods in the dataset. Finally, countries with fewer than 500,000 citizens are omitted from the dataset.

The Methodology

To estimate the parameters of the state failure model, I use a multinomial logit model where estimates are generated for a set of coefficients for each option, and for one of those options the coefficients are normalized to equal zero.³⁸ Multinomial logit analysis allows me to work under the assumption that the concept of a failing and failed do not share identical utilities.

I opt to use multinomial logit as opposed to conditional logit because in this type of analysis, the distinction between the two models is 'purely artificial.'³⁹ I argue that a certain set of independent variables determine the outcome of whether or not a state is failing or failed. However, with conditional logit model, the explanatory variable varies by outcome as well as by the state. I do not argue this; therefore, to use conditional logit would impose assumptions on my model that are not reflective of this analysis.

Furthermore, I avoid using ordered logit for the same reason. Ordered logit assumes that the process of state failure is ordered. While this is a natural assumption, and may very well be the case, the purpose of this analysis is not to determine which factors move a state along this continuum from stable to failing to failed. Furthermore, this analysis does not make the assumption that the state only moves along this continuum. While I acknowledge that the state could move along this path, I also argue that the state could transition into the failed stage, without ever entering the failing stage. Consequently, the goal of this analysis is to identify a specific set of factors that increase the probability that a state is approaching either the failing stage or the failed stage. Ordered logit does not allow one to make the distinction between the subset of factors that are unique to each stage of failure.

The Variables and the Model

Table 1 lists the variables described below.

Dependent Variable. To measure the stages of state failure the variables that measure ethnic conflict, civil conflict,⁴⁰ wars against oppressive regimes, and genocide/politicide are combined into one variable. These are dummy variables that

are constructed by the *State Failure Project: Phase I Findings*⁴¹ because they represent episodes of state failure according to the Task Force. However, for the purposes of this analysis, I aggregate the variables so that if zero events occurred it is coded as a '0,' if one event took place it is coded as '1,' if two events occurred it is coded as '2,' if three events occurred it is coded as '3,' and if all four events occurred it is coded as a '4.' I then recode the variable so that '0' remains '0' and '1–2' are coded as a '1' and '3–4' are coded as a '2.' This coding structure establishes a level of severity for the stages of state failure; where a moderate number of state failure occurrences represent a *Failing State* and a high incidence of state failure crises represent a *Failed State*.⁴²

Explanatory Variables: Multinomial Logit Analysis of State Failure. The statistical model predicts the causes of each stage of state failure and includes the explanatory variables: corrupt state authority, difficult history of state development, absence of democracy, political instability, economic insecurity, and proximity to a state in crisis.

The variable that measures the concept of corrupt state authority indicates the leadership capacity of a state and functions as a proxy measure for corrupt state authority. This variable measures the reported presence of corruption in the executive and legislative branches; and captures the ability of state actors to affect the demise of the state.

The *Corrupt State Authority* variable represents the level of corruption that is present in the government and is based upon a six-point scale where '6' represents high levels of corruption and '0' indicates there is no evidence to suggest corruption at the national level of government. This variable can be interpreted as follows: low values (values 0–1) represent low levels of corruption; intermediate values (values 2–4) represent moderate levels of corruption; and high values (values 5–6) represent high levels of corruption. This measure was constructed by the *State Failure Task Force: Phase I Findings*⁴³ and is derived from the daily files of the *New York Times*; it measures incidents of corruption at the national level.

TABLE 1
DESCRIPTION OF THE VARIABLES

State failure	Violent conflict Civil conflict indicator Ethnic conflict indicator Genocide/Politicide indicator War against oppressive Regime indicator
Dissident behavior	Riots event count
Non-violent protest	Aggregate demonstrations and strikes event count
Economic decline	One year lag per capita GNP
Proximity to a state in crisis	Number of state borders experiencing conflict
Corrupt state authority	Corrupt national government index
Difficult history of state development	Polity transition indicator
Autocratic regime	Autocracy index
Democratic regime	Democracy index

Having a difficult history of state development affects a modern state's ability to succeed and resuscitate itself post-failure. The *Polity Transition Variable* functions as a proxy measure for the concept of difficult state development, and measures the stability of the polity and its ability to successfully organize itself as a functioning state. This variable indicates that a state has a difficult history of state development given its inability to exercise control over its citizenry and borders for a consistent period of time with the incidence of abrupt regime changes. The measure employed is a binary indicator that is scored '1' whenever the Polity IV project records -66 which equals interruption, -77 which equals interregnum, or -88 which equals transition. This variable was constructed by Moore and Shellman⁴⁴ and is based upon the polity durability index developed in the Polity IV Global Data Set.⁴⁵

This analysis argues that the absence of democratic elements in the state's government creates a repressive environment that is conducive to state failure. Unlike autocratic nations, democratic nations do not engage in conflict with each other and democracies generally allow for an organized system of protest and provide a platform to address grievances. I argue that a state with some democratic elements is far more stable than an absolute autocracy. Therefore, I contend that states governed by full autocracies are at a greater risk of succumbing to state failure than either weak or partial democracies. Consequently, this model includes measures of the degree to which a nation is either autocratic or democratic. The *Autocratic Regime* variable represents the degree to which a polity is an autocracy and it measures the closedness of political institutions. In contrast, the *Democratic Regime* variable represents the degree to which a polity is a democracy and it measures the openness of political institutions. These measures were constructed by the *State Failure Task Force: Phase I Findings*⁴⁶ and are based upon the democracy and autocracy index developed in the Polity IV Global Data Set.⁴⁷ The Polity IV variable includes five features: competitiveness of participation, regulation of participation, executive recruitment competition, executive recruitment openness, and executive recruitment regulation, which are coded '0' to '2' and then aggregated. Specifically, Moore and Shellman⁴⁸ subtract the autocracy score from the democracy score to create a measure of institutional democracy that ranges from -10 to 10. I then separate the index into two separate variables, where -10 to 0 represents an autocracy and 0 to 10 represents a democratic regime.⁴⁹ Constructing two variables provides a more precise indication of how levels of autocracy and democracy influence the incidence of state failure, and represents a method of testing the argument that strong autocracies are more likely to fail when compared to transitional or weak democracies.

I argue that political instability is a major indicator of a state in crisis. To test this hypothesis I employ three variables that measure the concepts of non-violent protest and dissident behavior, which function as proxies for political instability. Together these variables indicate that a nation is experiencing conditions of political instability and is on the brink of an episode of failure. Political instability in the form of frequent political protests represents one of the key indicators of imminent state decline.

The *Riots Event Count* represents any violent demonstration or clash of more than 100 citizens involving the use of physical force. This variable was constructed by the *State Failure Task Force: Phase I Findings*⁵⁰ and is derived from the daily files of the *New York Times*; it represents the total number of events occurring in a given year.

The *Demonstrations Event Count* represents any peaceful public gathering of at least 100 people for the primary purpose of displaying or voicing opposition to government policies and/or authority; however, it excludes demonstrations that are anti-foreign in scope and intent. This measure was constructed by the State Failure Task Force–Phase I (1995) and derived from the daily files of the *New York Times*; it represents the total number of events occurring in a given year.

The *Strikes Event Count* represents any strike of 100 or more industrial or service workers that involves more than one employer and is aimed at government policies or authority. This measure was constructed by the State Failure Task Force–Phase I (1995) and derived from the daily files of the *New York Times*; it represents the total number of events occurring in a given year.

This study uses *Per Capita GNP* to measure the concept of economic decline. This analysis argues that economic deterioration directly affects the decline of a state and creates an unstable environment conducive to forced migration. Like political instability, severe economic decline is one of the key indicators of imminent state decline and the two are very important to understanding the occurrence of state failure.

Data for the GNP measure were compiled by Moore and Shellman⁵¹ and come from both the World Bank's World Development Indicators data and the Cross-National Time-Series Data Archive.⁵² The authors began with the World Bank data and then filled in missing observations with the Banks data, where available. Finally, they divided the data by population estimates obtained from Fearon and Laitin's study.⁵³ I then lag the per capita GNP measure by one year because previous studies⁵⁴ have demonstrated that the process of economic deterioration takes some time before it has an effect on internal state structures. Finally, due to its skewed distribution, the logged version of the per capita GNP variable is presented in the final model

The final measure, *Proximity to a State in Crisis* measures the concept of proximity to a failed state. This variable is constructed from data compiled by Moore and Shellman⁵⁵ and the State Failure Project-Phase III and measures the number of states experiencing any type of major conflict that border a nation. The literature establishes that state failure is disruptive and extremely perilous to neighboring states, especially those states in the developing world.

RESULTS

Estimating the Probability that a State will Transition from a Stable to Failing State

Table 2 reports the findings from the multinomial logit analysis covering the years 1955–2000; and the first equation in the table indicates the probability that a state

will transition from a stable to a failing state in the presence of certain conditions. Following the coefficient estimate results are the odds ratio results which are presented in Table 3.

I interpret the odds ratio results in lieu of the coefficient estimates because the logic behind the odds ratio is far more intuitive than an interpretation of the coefficient results or even the marginal effects when dealing with a multinomial logit model. The odds ratio proportion is multiplied by 100 and interpreted as a percentage change for the purposes of this analysis (Figure 1).

The odds ratio reports the probability of observing one outcome as opposed to another outcome. Essentially, the odds ratio allows for a more comprehensive understanding of the comparison between categories. In this analysis, the odds ratio findings allow me to determine the differences that exist between a stable state and failing state, a stable and failed state, and a failing and failed state.

Before considering the coefficients and odds ratio interpretation, note that the basic model performs generally well. The χ^2 tests indicate that the model specification is superior to the null model, the variance explained is high, and several of the variables influence the dependent variable in the anticipated direction, which supports the hypotheses.

Turning now to our parameter estimates, we see that non-violent protest produces a positively signed, statistically significant parameter estimate. We also see that the transition to a failing state is positively influenced by the presence of a

TABLE 2
MULTINOMIAL LOGIT COEFFICIENT ESTIMATES OF THE LIKELIHOOD THAT STATE
FAILURE WILL OCCUR

Variables	Stable to Failing	Stable to Failed	Failing to Failed
Dissident behavior	0.004 (0.081)	0.181*** (0.071)	0.176*** (0.081)
Non-violent protest	0.058*** (0.034)	0.037 (0.063)	-0.021 (0.063)
Democratic regime	-0.041 (0.052)	-0.085 (0.089)	-0.044 (0.080)
Autocratic regime	0.148*** (0.049)	0.087 (0.103)	0.061 (0.099)
Proximity to a state in crisis	0.023 (0.032)	0.167*** (0.052)	0.144*** (0.037)
Corrupt state authority	0.108*** (0.055)	0.109 (0.147)	0.002 (0.139)
Difficult history of state development	10.12*** (0.436)	10.71*** (0.739)	00.590 (0.715)
Economic decline	-0.245*** (0.086)	-0.459*** (0.175)	-0.215*** (0.085)
Constant	1.29*** (0.611)	-0.264 (1.32)	-1.55*** (1.22)
Log likelihood	-1305.50	-1305.50	-1305.50
Model chi-squared	111.27***	111.27***	111.27***
R squared	.79***	.79***	.79***
Number of observations	2,030	2,030	2,030

Note: Standard errors are in parentheses.***Significant at .10 level.

FIGURE 1
INTERPRETING THE ODDS RATIO

$$\frac{P_{ij}}{P_{i0}} = \frac{\eta_{ij}}{\eta_{i0}} = \exp(x_i' \beta_j) \quad j = 1, 2, \dots, J.$$

strong autocratic regime. Next, we see that the presence of a corrupt state authority increases the probability that a state will transition from stable to failing. Also, states that exhibit a difficult history of state development increase the probability that a state will transition to a failing state. Finally, economic insecurity produces a statistically significant parameter estimate that is consistent with the hypothesis, that declining economic conditions increase the probability that a state will transition from stable to failing. We now turn to a detailed discussion of each finding.

The odds ratio results indicate that the presence of non-violent protesting increases the odds that a state will transition from a stable to a failing state by almost 6 percent. This finding is consistent with the argument that ongoing non-violent protests weaken the state (Davenport *et al.*, 2003). The presence of demonstrations and strikes indicates that the political legitimacy of the polity is in question. With the frequent and continuous occurrence of strikes and demonstrations, the state must direct resources from various sources to maintain order, security, and legitimacy. These acts of protest are debilitating to the state and weaken the effectiveness of the government.

The odds ratio results suggest that the presence of an autocratic regime increases the odds that a state will transition from a stable to a failing state by approximately 16 percent. This finding is consistent with the argument that autocratic regimes are susceptible to state failure crisis because of the environment of repression that is created in these types of states.⁵⁶ Unfortunately, the measure for democracy fails to achieve significance in this analysis so there is no method to compare the degree to which each regime type influences the transition from a stable to a failing state. Nevertheless, from these findings we can infer that democratic regimes do not

TABLE 3
MULTINOMIAL LOGIT ANALYSIS OF THE LIKELIHOOD THAT STATE FAILURE WILL OCCUR – ODDS RATIO RESULTS

Variables	Stable to Failing	Stable to Failed	Failing to Failed
Dissident behavior	0.44%	19.8%***	19.3%***
Non-violent protest	5.97%***	3.76%	-2.08%
Democratic regime	-4.1%	-8.15%	-4.27%
Autocratic regime	15.9%***	9.12%	5.88%
Proximity to a state in crisis	2.30%	18.2%***	15.5%***
Corrupt state authority	11.4%***	11.5%	0.17%
Difficult history of state development	206.4%***	452.6%***	80.3%
Economic decline	-21.7%***	-36.8%***	-19.3%***

***Significant at .10 level.

influence the transition from a stable to failing state whereas there is evidence to suggest that autocratic regimes have a sizeable influence on this transition.

The third variable to achieve significance is the presence of a corrupt state authority. The results indicate that the presence of a corrupt state authority increases the odds that a state will transition from a stable to a failing state by approximately 11 percent. This measure is employed in the analysis to examine the hypothesis that corrupt state leaders have a tremendous influence on the deterioration of the state. When leaders fail to properly manage their state then it becomes susceptible to economic and political failure which eventually leads to state crisis and positions it for eventual collapse. This finding is consistent with the previous literature;⁵⁷ although we are unaware of any studies that specifically investigate this in the context of statistical modeling.

The fourth finding is based upon the hypothesis that states with a difficult history or lacking a history of state development are more susceptible to state failure crisis. The odds ratio result indicates that states exhibiting a difficult history or lacking a prior history of state development increases the odds that a state will transition from a stable to a failing state by approximately 206 percent. This result is the most significant finding in this analysis. It illustrates that states lacking a sufficient model of state organization in their past are at the greatest risk of experiencing state crisis.⁵⁸

The final statistically significant parameter estimate is the measure of economic insecurity. The odds ratio result suggests that economic decline increases the odds that a state will transition from a stable to a failing state by almost 22 percent. It is important to note that while hypothesized and discussed in case studies and previous statistical models, we are unaware of any prior studies that find statistical evidence that economic conditions play a role in the occurrence of state failure. The findings provide statistical evidence to suggest that economic decline shares a relationship with the incidence of state failure.

Now we turn to the hypotheses for which we did not find support. Deviating from the findings of previous research,⁵⁹ this analysis fails to find that dissident behavior contributes to the transition of a state from stable to failing. The lack of support for this hypothesis is surprising because we anticipate that similar to non-violent protest, dissident behavior functions in the same manner by destabilizing the polity and compromising its legitimacy and effectiveness. However, it is possible that extreme levels of political instability, such as riots, are severe enough to move a state from stable to failed, but not from stable to failing. Otherwise stated, the occurrence of persistent riots is too extreme a factor to cause a state to enter the failing stage. Consequently, one would not expect riots to indicate that a state is on the brink of failing, but rather that it is on the brink of absolute failure.

Also, surprisingly this analysis fails to find support for the assertion that states in crisis have the potential to destabilize stable states given a close proximity. There is evidence to suggest that crisis in one state can destabilize an entire region.⁶⁰ As previously discussed, the collapse of several nations in the Horn of Africa and the failure of Sierra Leone following the collapse of Liberia indicate that states in crisis have a tremendous influence on their neighbors. Further investigation of this

relationship is required because one would expect a state in crisis to have some influence on the functioning abilities of its neighboring states.

Consistent with the assertion that partial democracies are not likely to contribute to the transition from a stable to failing state, the analysis fails to find support for the measure of democratic regimes. Therefore we can infer from the findings that when compared to autocratic regimes, partial democracies are less likely to contribute to the transition of a state from stable to failing.

Estimating the Probability that a State will Transition from a Stable to Failed State

Turning now to the probability that a state will transition from stable to failed, we see that dissident behavior produces a positively signed, statistically significant parameter estimate. The results also demonstrate that the transition from a stable to failed state is positively influenced by the proximity to a state in crisis. Also, states that exhibit a difficult history of state development increase the probability that a state will transition to a failed state. And once again, economic insecurity produces a statistically significant parameter estimate that is consistent with the hypothesis.

The findings indicate that the presence of dissident behavior increases the odds that a state will transition from a stable to a failed state by almost 20 percent. This finding is consistent with previous studies that find that dissident behavior weakens the polity and creates a politically unstable environment that if not sufficiently addressed or appropriately subdued can lead to state collapse.⁶¹

The odds ratio result indicates that states exhibiting a difficult history or lacking a prior history of state development increases the odds that a state will transition from a stable to a failed state by almost 453 percent. This variable reports the most significant finding in this analysis. It is apparent that nations lacking the ability to successfully organize themselves into functioning states are at the greatest risk of state failure. This is consistent with previous studies that argue that nations lacking political and economic institutions are simply unable to construct a modern state because they lack a blueprint.⁶²

The third variable to achieve significance is the proximity to a state in crisis. The results indicate that the proximity to a state in crisis increases the odds that a state will transition from a stable to a failed state by approximately 19 percent. This measure is employed in the analysis to examine the hypothesis that neighboring states in crisis have a tremendous influence on the failure of the state. This finding is consistent with previous studies⁶³ that find there is a predilection for state crisis and instability to be contagious to its neighbors.

Finally, the odds ratio result suggests that economic decline increases the odds that a state will transition from a stable to a failed state by approximately 37 percent. This finding is statistically significant and its directional influence is consistent with the hypothesis. Consequently, the analysis provides evidence that economic decline has a contributing influence on whether a state will transition from a stable to failed state.

Regarding the hypotheses for which we did not find support, we see that non-violent protest fails to achieve significance. We also see that the transition from a stable to a failed state is not influenced by the presence of either a democratic or autocratic regime.

Additionally, we see that the presence of a corrupt state authority has no apparent influence on the probability that a state will transition from stable to failed.

These results are not surprising because all but one variable is a polity feature, and the one variable that is not a polity feature, non-violent protest, one would not expect this factor to play a role in the transition from a stable to a failed state. In order to drive a nation from stable to complete failure there must be a severe trigger condition present. While the leadership of the government and the structure of the polity are indeed important, one would not expect that the presence of a corrupt state leader, a partial democracy, and/or a strong autocracy to propel a nation from stable to failed. Also, one would not expect that the presence of demonstrations and strikes would have the ability to drive a nation from stable to complete failure. These factors alone and combined are not severe enough in nature to create that type of transition. However, one would expect a war in a neighboring nation, uncontrollable riots, a poor economy, and a state with a difficult history of organization to be critical factors in the transition from stable to failed. These conditions are severe enough that if a stable state were faced with them simultaneously it would be unable to prevent itself from collapsing entirely.

Estimating the Probability that a State will Transition from a Failing to Failed State

Unlike the transition from a stable to failed state, the transition from a failing to a failed state does not require such a high threshold of severity. A failing state is already unstable and weak and therefore the presence of only a few very mild conditions could easily drive it towards failure. The results support this assertion. While only three measures achieve significance in this analysis, they are undoubtedly those factors that have the strongest and most immediate impact on the functioning ability of the state.

The parameter estimates demonstrate that the presence of dissident behavior increases the probability that a state will transition from failing to failed. We also see that the transition to a failed state is positively influenced by the proximity of a state in crisis. Finally, we see that economic decline contributes to the transition from failing to failed, although its influence is substantively weak.

The odds ratio results illustrate that dissident behavior increases the odds that a state will transition from a failing to a failed state by approximately 19 percent. This finding is consistent with our hypothesis that the presence of political instability in an already crippled nation increases the probability that the state will experience complete failure.

The results also demonstrate that the proximity to a state in crisis increases the probability that a state will transition from a failing to a failed state by approximately 16 percent. This finding is consistent our hypothesis that states experiencing crisis are susceptible to state collapse if its neighbors are also experiencing crisis. Inevitably if the crisis in one nation is severe enough it will eventually spill over to its neighbors. This phenomenon is eventually what created a situation of crisis for the entire region of the Horn of Africa in the 1980s and 1990s.

Finally, the odds ratio result suggests that the presence of economic insecurity increases the probability that a state will transition from a failing to a failed state by approximately

19 percent. Substantively relevant and supported by statistical evidence, this finding suggests that economic decline functions as a major contributor to state failure.

Now we turn to the hypotheses for which we did not find support. The analysis fails to support that hypothesis that non-violent protest influences the transition of a state from failing to failed. We also see that the transition from a failing to a failed state is not influenced by the presence of either a democratic or autocratic regime. Further, the presence of a corrupt state authority has no apparent influence on the odds that a state will transition from failing to failed. Finally, the hypothesis that a difficult history of state development contributes to the transition from a failing to a failed state is not supported by the findings of this analysis.

These results are not surprising because one would anticipate that the transition from a failing to a failed state should be triggered not by institutional and historical features of the polity but by the presence of deteriorating economic conditions, crisis in a neighboring state and the presence of dissident behavior. By the time that a state has transitioned to failing it is already in a precarious situation. At that point, one would not anticipate that the regime in power, its prior history of state development, the effectiveness of the state leader and the occurrence of non-violent protests to have the ability to move a state from failing to failed. As determined by the previous analyses, these factors positioned the state in the stage of failing. In order to propel a nation from failing to complete failure there must be a set of tangible factors present that are capable of disrupting the tenuous position of the already unstable state.

CONCLUSION

The initial purpose of this project was to develop a causal model of state failure that would be grounded in a comprehensive theoretical framework, yet at the same time be able to recommend policy alternatives. This purpose led to the development of a parsimonious model of state failure that would introduce a unique definition of state failure and with that an alternative modeling process (Table 4).

With regards to the findings from this analysis the results improve upon existing models of state failure by identifying certain factors such as the absence of a prior history of state development, the proximity to a state in crisis and the presence of a corrupt state authority as salient conditions that are consistently present in various stages of failure. These findings are of particular importance because these explanatory conditions are absent from previous statistical models of state failure, which suggests there is a need to incorporate these measures in future statistical models that are interested in obtaining better forecasts of state failure. Additionally, the findings provide some support for the hypothesis that strong autocratic regimes are far more susceptible to state failure than partial democracies.⁶⁴ This is an important finding because it contradicts the arguments of the *State Failure Task Project*⁶⁵ who assert that partial democracies are at a greater risk of failure than strong autocracies. The findings of this study fail to support their arguments. This study also gives some credence to the argument that deteriorating economic conditions play a critical role in the deterioration of the state. Previous studies have

TABLE 4
HYPOTHESES SUPPORTED BY THE MULTINOMIAL LOGIT ANALYSIS

Variables	Stable to Failing	Stable to Failed	Failing to Failed
Dissident behavior	—	Yes	Yes
Non-violent protest	Yes	—	—
Democratic regime	—	—	—
Autocratic regime	Yes	—	—
Proximity to a state in crisis	—	Yes	Yes
Corrupt state authority	Yes	—	—
Difficult history of state development	Yes	Yes	—
Economic decline	Yes	Yes	Yes

been unable to find statistical support for the relationship between salient economic factors and state decline.⁶⁶ However, this analysis finds that economic decline plays a direct role in state decline. Finally, the most important achievement of the state failure model developed for this study is the way in which state failure is measured and how it improves the understanding of each stage of state failure. This study classifies states as either (2) failed; (1) failing; or (0) not failing/not failed. The *State Failure Task Project* argues that it is statistically difficult to classify the capacity of a state as a categorical variable and therefore approach the concept of state failure as an absolute transition: it either occurs or it does not. Given their definition of state failure, they measure state failure as a dichotomous variable. However, the findings of this analysis demonstrate that state failure is a process of two stages and a discrete set of factors increases the probability of entering one stage as opposed to the other. Consequently, the parameters of this variable allow me to capture the unique precursors to each stage, which ultimately represents a more precise measure of state failure and the conditions that contribute to the occurrence of each stage. Having identified the preconditions for each stage of failure, I now look forward to using additional modeling techniques, such as ordinal logit, to determine those factors that move the state along the continuum of failure.

This study builds upon the work of conflict analysis by suggesting an alternative approach to understanding state failure and developing a mechanism to examine the precursors to state decline. This study has produced very intriguing findings that make a significant contribution to policy development and policy analysis. From the results, I can only hope that it inspires a greater interest and commitment to further study the factors that contribute to state collapse in an effort to provide more accurate early warning models of state decline before the state fails and humanitarian emergencies emerge.

NOTES

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APPENDIX I

LIST OF COUNTRIES IN THE ANALYSIS

Afghanistan	Czech Republic	Korea, South	Russia	Western Samoa
Albania	Czechoslovakia	Kuwait	Rwanda	Yemen
Algeria	Denmark	Kyrgyzstan	San Marino	Yemen, North
Andorra	Djibouti	Laos	Sao Tome-Principe	Yemen, South
Angola	Dominica	Latvia	Saudi Arabia	Yugoslavia
Antigua & Barbuda	Dominican Republic	Lebanon	Senegal	Zambia
Argentina	Ecuador	Lesotho	Serbia/Montenegro	Zimbabwe
Armenia	Egypt	Liberia	Seychelles	
Australia	El Salvador	Libya	Sierra Leone	
Austria	Equatorial Guinea	Liechtenstein	Singapore	
Azerbaijan	Eritrea	Lithuania	Slovakia	
Bahamas	Estonia	Luxembourg	Slovenia	
Bahrain	Ethiopia	Macedonia	Solomon Islands	
Bangladesh	Ethiopia (post 1993)	Madagascar	Somalia	
Barbados	Fiji	Malawi	South Africa	
Belarus	Finland	Malaysia	Spain	
Belgium	France	Maldives Islands	Sri Lanka	
Belize	Gabon	Mali	St. Kitts-Nevis	
Benin	Gambia, The	Malta	St. Lucia	
Bhutan	Georgia	Mauritania	Vincent and the	
Bolivia	Germany	Mauritius	Grenadines	
Bosnia and Herzegovina	Germany, East	Mexico	Sudan	
Botswana	Germany, West	Moldova	Suriname	
Brazil	Ghana	Monaco	Swaziland	
Brunei	Greece	Mongolia	Sweden	
Bulgaria	Grenada	Morocco	Switzerland	
Burkina Faso	Guatemala	Mozambique	Syria	
Burma	Guinea	Namibia	Taiwan	
Burundi	Guinea-Bissau	Nepal	Tajikistan	
Cambodia	Haiti	Netherlands	Tanzania	
Cameroon	Guyana	New Zealand	Thailand	
Canada	Honduras	Nicaragua	Togo	
Cape Verde	Hungary	Niger	Trinidad	
Central African Republic	Iceland	Nigeria	Tunisia	
Chad	India	Norway	Turkey	
Chile	Indonesia	Oman	Turkmenistan	
China	Iran	Pakistan	USSR (Soviet Union)	
Colombia	Iraq	Pakistan (pre 1971)	Uganda	
Comoros	Ireland	Palau	Ukraine	
Congo-Brazzaville	Israel	Panama	United Arab Emirates	
Congo-Kinshasa	Italy	Papua New Guinea	United Kingdom	
Costa Rica	Jamaica	Paraguay	Uruguay	
Côte d'Ivoire	Japan	Peru	Uzbekistan	
Croatia	Jordan	Philippines	Vanuatu	
Cuba	Kazakhstan	Poland	Venezuela	
Cyprus	Kenya	Portugal	Vietnam	
	Korea, North	Qatar	Vietnam, North	
		Romania	Vietnam, South	

APPENDIX II

STATE FAILURE TASK FORCE: LOGISTIC REGRESSION RESULTS

Variables	Coefficient	Standard Error
Infant mortality (Log)	.62	.20
Trade openness (Log)	-.85	.22
Full democracy	-.16	.40
Constant	1.88	.84

Note: All coefficients are significant at the .05 level.

APPENDIX III

DESCRIPTIVE STATISTICS

Variable	Mean	Standard Deviation	Minimum	Maximum
State failure	0.251	0.434	0	2
Dissident behavior	0.161	0.859	0	16
Corrupt state authority	0.499	1.25	0	6
Non-violent protest	0.675	1.36	0	26
Autocracy	-1.69	3.13	-10	0
Democracy	1.58	3.38	0	10
Difficult history of state development	0.041	0.198	0	1
Proximity to a state in crisis	1.08	1.98	0	6
Economic decline	49,36.4	8,247.5	33.3	47,850.7

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