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State Dominance and Political Corruption: Testing the Efficacy of an Alternate Configuration of Institutional-Anomie Theory Cross-Nationally

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State Dominance and Political Corruption: Testing the Efficacy of an Alternate
Configuration of Institutional-Anomie Theory Cross-Nationally

by

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A thesis submitted in partial fulfillment
of the requirements for the degree of
Master of Arts
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Dedication

For my dad, who always believed in me. I wish that you could have seen this.

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ABSTRACT

Extant assessments of Messner and Rosenfeld’s institutional-anomie theory (1994) have generally supported the thesis that, in social collectives where the economy dominates, non-economic institutions (i.e. the family, education, polity) are rendered feeble, unable to exert their normative controls. The cultural values of these societies places primacy on “making it” (monetary success), while at the same time placing a much weaker emphasis on the licit means of achieving these goals. The resultant state is one of anomie, conducive to crime. Messner and Rosenfeld have extended their argument stating that it is not economic dominance *per se* that contributes to high crime rates, but any tip in the institutional balance of power. The current study examines one of these configurations which hypothesizes that, in nation-states where the state dominates other institutions, the dominant cultural orientation is one of moral cynicism, conducive to corruption-prone behaviors. Using macro-level data, the current study assesses the efficacy of this alternate configuration of institutional-anomie theory as a predictor of corruption cross-nationally. Using a sample of 125 nations, state dominance is positively related to corruption. The effects of the state were both mediated and moderated by economic strength, measured as levels of industrialization.

Chapter One

Introduction

Over the past two decades, interest has risen sharply in the international community on the topic of political corruption and its damaging impact on societies, especially those in the developing and transitioning world. International financial institutions such as the International Monetary Fund (IMF) and the World Bank have added stipulations making their loans conditional upon the borrower's adoption of anti-corruption policy reforms (Brown and Cloke, 2004; Elliott, 1997), and corruption has emerged as a global issue in bodies such as the Organization for Economic Co-Operation and Development (OECD), the Organization of American States, and the United Nations General Assembly (Fitzsimons, 2002). Anti-corruption civil society organizations such as Transparency International have been calling for greater accountability and transparency on the part of nations. These organizations may look to academic research to guide policy and reform, however; the dissemination of empirical corruption studies has, to date, been scant.

Figure 1 (below) illustrates the pervasiveness of corruption worldwide in 2006. Published by Transparency International, the Corruption Perceptions Worldmap is based upon that organization's Corruption Perceptions Index, which assigns scores to nations from 10 ("squeaky clean") to 1 ("filthy") based upon published data and expert opinions from within and outside each nation. The United Nations estimates that bribery has

become a “\$1 trillion industry worldwide” (2004). As illustrated on the Corruption Perceptions Worldmap by the red to dark red or wine-colored nations (those whose corruption perceptions score is 4.0 or below), corruption is endemic on every continent, with the possible exemption of North America and Oceania. The countries most rife with corruption are largely the developing nations of Africa, Latin America and Southeast Asia, as well as the transitional post-Soviet nations of Eastern Europe.

Figure 1: Corruption Perceptions Worldwide (2006)



Reprinted from Corruption Perceptions Worldmap. Copyright 2007 Transparency International: The Global Coalition Against Corruption. Used with permission.¹

According to a 2002 survey, Transparency International reports that 96% of

respondents in Pakistan who have had contact with the courts have encountered corrupt

¹ Transparency International (TI) is the global civil society organization leading the fight against corruption. Through more than 90 chapters worldwide and an international secretariat in Berlin, Germany, TI raises awareness of the damaging effects of corruption and works with partners in government, business and civil society to develop and implement effective measures to tackle it. For more information, visit <http://www.transparency.org>.

practices (Rodriguez and Ehrichs, 2007). Susan Rose-Ackerman notes that in Guinea continuous demands for bribes are a feature of virtually every business deal, while Indonesia's customs department had become so "ingrown" with corruption that the head of that agency signed control of that department over to a private Swiss firm (1997, p. 32). Estimates suggest that annually up to five percent of the global economy is lost to corruption (Karklins, 2005).

What is corruption? Scholarly researchers and public policy makers have struggled with the ambiguity of a definition of corruption and its myriad forms, frequencies, and consequences (Johnson and Sharma, 2004). Definitional issues will be discussed at length in Chapter 2. For the purposes of this study, the succinct definition given by Transparency International, *the misuse of public power for private gain at the expense of the public good*, will be used (www.transparency.org). This definition limits the scope of the study to the political realm, yet is broad enough to allow for comparative study across a range of nations and cultures.

The very nature of corruption makes this crime inherently difficult to study and, partially due to this, scholarly research on the topic has been largely underdeveloped. While this theoretical and analytical gap has been shrinking in the past decade, criminology lags behind disciplines such as political science, economics, anthropology, and public administration in its treatment of this problem. A possible explanation as to why criminologists seem to ignore this phenomenon, aside from the intrinsic *sub rosa* character of corrupt acts, is that criminology in general, and American criminology in particular, leans toward the "provincial" (Zimring and Johnson, 2005, f.n. 1). Radical

criminologists working in the arena of state and political crime have noted that, from 2000 to 2005, three of the discipline's leading journals² allocated a mere 3% of their 575 articles to topics involving crimes of the powerful, with only seven of these addressing either political or state crime. The remaining space was devoted to lower class crime and/or its control (Lynch and Michalowski, 2006, p. 194). Although in his 1989 American Society of Criminology (ASC) presidential address, William J. Chambliss called for the "study of more harmful and insidious forms of crime previously neglected" and "nearly all of the works on state crime in the last thirty years have included calls (and sometimes a desperate plea) for more criminological attention to illegal actions of states and governments," these topics have remained marginalized in the literature (Kauzlarich, Matthews, and Miller, 2001, p. 174). Definitional disputes and measurement issues have in large hindered the study of this phenomenon (Jain, 1998, p. 4).

As corruption is an international concern, research pertaining to this phenomenon must be comparative. However, cross-national/comparative criminology, including the study of state crime and other crimes of the powerful, has been relegated to a small sub-field in orthodox criminology. Globalization has increased the need for scholars to understand their ever-changing world as a whole. This is not new. Starting as early as 1889, anthropologists sought to construct cross-cultural theory, and, beginning in the 1950's other social sciences including sociology, psychology, and political science followed suit (Bennett, 1980). Criminology must also look to

² These include the official publications of the discipline's two main professional organizations, the American Society of Criminology (*Criminology*) and the Academy of Criminal Justice Sciences (*Justice Quarterly*), as well as the *British Journal of Criminology*.

comparative study for both theory testing and theory generation, and for the “development of an *universal* criminology” (Karstedt, 2001, p. 288, emphasis in original), while avoiding the pitfalls of grand theories that are a-cultural and a-historical (Lynch and Groves, 1995; Mills 1959/2000). Furthermore, cross-national testing of theory moves the discipline as a whole from a culturally biased “home-country based criminology” (Liu, 2007, p. 4) that is narrow in scope, its theories applicable only to “a certain criminal behavior in a particular culture at a particular time” (Bennett, 1980, p. 253.), toward a more encompassing approach.

In addition to adding to the knowledge base, there are practical applications for comparative research. Globalization has made corrupt practices a transnational crime much like human trafficking, drug smuggling, industrial and technological espionage, and dissemination of child pornography, among others. Transnational crime, by its very nature, requires a coordinated and cooperative response in order to determine best practices, analyze how criminal organizations operate, and guide public policy (Bennett and Lynch, 1990; Howard, Newman, and Pridemore, 2000, Williams, 1999). With advances in transportation, communication, and other technologies, economic crimes such as fraud, money laundering, identity theft, and corruption also extend beyond the realm of the political limits of the nation-state (Howard et. al., 2000). Criminology must also broaden its horizons.

Similar to other white-collar offenses, (price-fixing, for example), individual acts of corruption often victimize persons without their direct knowledge. Victims also may fail to report solicitations for bribes out of necessity or fear, due to threats of extortion.

At the societal level, indirect violations of human rights and democracy through corrupt acts may lack a clear offender and victim, but constitute state crimes against the citizenry as a whole, and are thus worthy of criminological investigation (Green and Ward, 2004). Corruption weakens the legitimacy of governments and undermines the confidence of citizens. It also distorts the distribution of benefits, exacerbating existing injustices and inequalities; “benefits and advantages are likely to flow to the few and the well-connected while costs are extracted from society at large—ultimately, from the poor and powerless most of all” (Johnston, 2005, p. 25. See also Girling, 1997; Fitzsimons, 2002; Lynch and Michalowski, 2006; Rose-Ackerman, 1997). As Zimring and Johnson suggest:

corruption is one category of crime where the strong will prey on the weak and where the net effect of many acts of corruption may be regressive rather than redistributive of income. In many, if not most, settings where corruption flourishes, the offense pattern produces greater rather than lesser concentrations of wealth among advantaged populations. (2005, p. 798)

The effects of corrupt practices on the disadvantaged range from further degraded living conditions among already impoverished citizens to even death. Rose-Ackerman (1997) cites several case studies that provide examples of the harms caused by corruption. For example, one irrigation district in India indicated that 20-50% of government-provided funds were wasted due to corruption and misuse and, in Korea, a shoddily-built department store collapsed, killing several people—building inspectors had allegedly accepted bribes from substandard contractors (1997, p. 32). What is

more, corrupt practices are associated with other criminal activities including drug trafficking, organized crime, money laundering, and illegal money transfers, the latter of which have been suggested to support international terrorist organizations (Gambetta, 2002; Jain, 1998; Moran, 2001; United Nations, 2004).

The current study seeks to add to this small but growing body of literature on corruption, a topic worthy of study due to its pervasiveness, global nature, and perhaps most importantly, its impact on humanity as a cause of suffering and despair. As noted by Jain (1998), the prevalence and potential harms produced by corrupt acts has, as of yet, far exceeded the scholarly that this phenomenon has received. The current study seeks to aid in the remedy of this omission. The purpose of this research is to transport and test an alternate configuration of Messner and Rosenfeld's Institutional-Anomie theory (IAT) of crime, a "particularly apt" theory for cross-national comparative analysis (Karstedt, 2001, p. 292). In contrast to the conventional interpretation of IAT, where economic dominance weakens the normative controls of other institutions leading to high levels of instrumental crime, here the institutional balance of power is tipped in favor of the state, which predicts high levels of crimes of power such as bribery, clientelism, maladministration, and abuses of authority. Under this configuration, rather than a normative breakdown leading to the anomic state, state dominance leads to cultural patterns of moral cynicism and withdrawal in the citizenry, which Messner and Rosenfeld suggest will enable corruption.

This thesis is organized as follows: First, a working definition of corruption will be established and correlates and schools of thought discussed. An overview of the

findings from extant corruption literature will be provided, with an emphasis on macro-level, cross-national research. Chapter 3 provides the theoretical background of institutional-anomie theory, a review of literature, and introduces the alternate configuration of institutional-anomie to be tested in the current study. Chapter 4 will state the hypotheses to be tested, and provide an in-depth discussion of the data and methods used. Chapter 5 will present univariate (descriptive), bivariate, and multivariate results. An examination of the assumptions of ordinary least-squares will be presented, with alternate models proposed as a form of sensitivity analysis. Chapter 6 will discuss the findings, acknowledge the limitations of the current study, and present calls for future research.

Chapter Two

Corruption

What is corruption? Scholarly researchers and public policy makers have struggled with the ambiguity of defining it and its myriad forms, frequencies, and consequences (Gambetta, 2002; Johnson and Sharma, 2004, United Nations, 2004). The literature provides multiple definitions, yet none are clear-cut or definitive. According to Johnston, “an irony of corruption is that where it is most important, it can also be most difficult to define” (2001, p. 28). Legalistic, relativistic, and descriptive definitions have been suggested, but a clear consensus has yet to be reached. The concept of corruption is still, according to the United Nations, “evolving” (2004).

The use of legal definitions attempts to provide a universal “objective” standard; however, as Brown and Cloke (2004) rejoin, this standard “tends to assume the same set of ‘rules’ operate in different political systems and cultural settings and by default it is always Western expectations and standards that are presumed universal” (p. 284). Rooted in the concept of the rule of law, legal definitions of corruption often go hand in hand with moralistic interpretations of an “unsuccessful ‘other’” (Sajó, 2003, p. 173). Cultural relativism, however, suggests that these rule and norms are not universal, rather a “moving target” approach should be used to situate corruption in the proper context (Moran, 2001, p. 380), be it to facilitate a criminalized economy, to “grease the wheels” of a fledgling democracy, or as a holdover from a traditional past based upon

norms of kinship (Sajó, 2003, p. 187). In some countries, rather than corrupt activities being proscribed, it is considered a moral duty for a state agent to act for the benefit of family and/or friends (Amundsen, 1999). As Gambetta states, “the notion of what is legitimate and legal varies from country to country and time to time, the definition of corruption...must vary accordingly, and there cannot be one for all” (2002, p. 34).

Although corruption may occur in private enterprise, as well as at the intersection of the state and corporations where the state initiates or facilitates illegal or injurious actions perpetrated by corporations, generally, when we speak of corruption, we are concerned with administrative or political malfeasance—that which occurs in the public sphere (i.e. governments, the state apparatus). Nye (1967) supplies one of the most popular definitions of public corruption. In his seminal book *Bribes*, Nye defines corruption as a:

behavior which deviates from the normal duties of a public role because of the private-regarding (family, close private clique) pecuniary or status gains; or violates rules against the exercise of certain types of private-regarding influence. This includes behaviors as bribery (use of rewards to pervert the judgment of a person in a position of trust); nepotism (bestowal of patronage by reason of ascriptive relationship rather than merit); and misappropriation (illegal appropriation of public resources for private-regarding use) (quoted in Kotkin, 2002, f.n. 25).

Robinson (1998) further distinguishes between incidental (individual), institutional, and systemic (society-wide) corruption, while Philp (1997) notes that

definitions are mostly centered on public office, public interest, and the market. According to Amundsen (1999), corruption is “a particular (and, one could say, perverted) state-society relation” (p. 2).

In order to facilitate comparative research, Johnson and Sharma (2004) suggest that researchers define corruption by example. Few states have laws that expressly define a category of illicit acts as political corruption, rather laws are codified that condemn crimes such as bribery, extortion, or electoral misconduct (Philp, 1997). International bodies such as the United Nations and the International Chamber of Commerce have also adopted a descriptive approach, “covering various forms of corruption that exist now, but also enabling states to deal with other forms that may emerge” (United Nations, 2004). In line with this descriptive approach, Karklins has developed a typology of practices in post-communist nations that illustrates the range of activities that fall under the rubric of corrupt acts (see Table 1).

Table 1: Karklins' typology of post-communist corruption

Low-level administrative	<ul style="list-style-type: none">• Bribery of public officials to bend rules• Deliberate overregulation, obfuscation,• Using licensing and inspection powers for extortion
Self-serving asset stripping by officials	<ul style="list-style-type: none">• Diverting public resources for civil servant spoils• Mismanagement and profiteering from public resources• Profiteering from privatization• Malpractice in public procurement• Nepotism, clientalism, and "selling" of jobs
"State capture" by corrupt networks	<ul style="list-style-type: none">• <i>De facto</i> takeover of public institutions for private business or criminal activity• Forming collusive networks to limit political competition• Undermining free elections through slush funds, hidden advertising, etc.• Misuse of legislative power• Corruption of the judicial process• Misuse of auditing, investigatory, and oversight powers• Using <i>kompromat</i> (propaganda) for political blackmail and coercion• Corruption of and in the media

(Adapted from Karklins, 2002, p. 24)

As illustrated in Karklins' typography, corrupt practices include those beyond the criminal offense of bribery. In addition to the examples of malfeasance listed, corrupt administrations often operate in collusion with other criminal enterprises such as drug trafficking, money laundering, organized crime, the underground economy, and illegal money transfers (Gambetta, 2002; Jain, 1998; Moran, 2001).

Although definitional issues are important, they remain unresolved in the literature, and lie beyond the scope of the purpose of the current analysis. For the purposes of this research, a conventional, albeit imperfect, core definition of political corruption supplied by Transparency International will be used—*the exercise of public power for private gain* (www.transparency.org). This definition spans the corruption continuum described in Karklins' typology, ranging from low-level administrative acts

such as bribing an officer of the law to rent-seeking (public officials illegally charging for services after creating artificial shortages) to kleptocracy (literally, “rule by thieves”) or state capture (Johnson and Sharma, 2004; Karklins, 2002; 2005). The latter may be exemplified by cases such as Zaire under Mobutu, the Philippines under Marcos, and Nicaragua under Samosa (Jain, 1998, p. 23).

Compared to the relativistic stance, where corruption is placed within respective social contexts, the broad definition adopted in the present study allows for cross-national comparison across a range of cultures. What we gain is generalizability, and the ability to compare the same behaviors across space and time, even where legalistic definitions may prove inapplicable (see Gambetta, 2002, p. 51). Finally, this definition is consistent with the current consensus found in the literature (Goudie and Stasavage, 1998; Kaufmann, Kraay and Mastruzzi, 2003; 2007a; 2007b; Montinola and Jackman, 2002; Sandholtz and Koetzle, 2000; Svensson, 2005; Treisman, 2000; Xin and Rudel, 2004) as well as with the analytical purpose of the current study.

Schools of thought and empirical evidence

The empirical study of corruption is still in its infancy, with “no body of theory ready made for the problem at hand” (Rose-Ackerman, 1978, p. 3). The definitional discrepancies discussed above lead Jain (1998) to observe that “[e]conomists seem not to have yet developed a vocabulary, leave [sic.] alone a theory, that can explain the wide range of activities that come under the umbrella of corruption” (p. 4).

Although scholarly research pertaining to this phenomenon exists prior to the 1990’s (most notably, Leff, 1964; Nye, 1967; Rose-Ackerman, 1978; Scott, 1972), a

majority of the cross-national, cross-cultural comparative research has appeared only in the past two decades. The bulk of these studies emerged from the disciplines of political science, public policy, and economics, and were largely driven by anti-corruption agendas (Kotkin and Sajó, 2002). The principal barrier to comparative studies of corruption has been measurement problems, such as the lack of valid measures across nations (Ades and DiTella, 1999; Husted, 1999; Knack, 2006; Mauro, 1997; Rose-Ackerman, 1997; Svensson, 2005; Xin and Rudel, 2004), and therefore, large-*n* empirical literature is greatly outnumbered by theoretical literature and case studies (Husted, 1999; Treisman, 2000). With the advent of subjective cross-national corruption indices, such as those published by Business International (BI), the World Bank Group, and Transparency International a number of macro-level studies across nations have been made available in recent years.

Early theories of corruption assumed that corruption and bribery are universally immoral and ethically suspect (Kotkin and Sajó, 2002; Nye, 1967; Sajó, 2003). Under the 19th century idea of the rule of law, notions such as “geographical morality” and “socially inferior” societies explained the prevalence of corruption in the West’s colonies and less developed nations (Kotkin and Sajó, p. 25). Under a moralistic approach, definitions focus on behaviors, certain motive or traits of an agent, (or individual), that leads to corrupt acts and practices. These suspect behaviors may include the “degradation of an agent’s ethical sense,” or speak to an individual’s “lack of moral integrity, or even to their depravity” (Gambetta, 2002; p. 34).

By the 1960’s, the anthropological notion of cultural relativism repudiated

theories of moral degradation. Cultural relativist thought explains corruption by societal emphases on gift giving, kinship loyalties, and personal ties rather than an adherence to the rule of law (Kotkin and Sajó, 2002; Jain, 1998; Montinola and Jackman, 2002). Based upon cultural norms and rooted in the respective social context, what may appear in a purely legalistic sense as corruption, can be seen as mere cultural differences rather than social harms, making a core definition of the practice impossible. Few quantitative studies include measures of cultural norms, due to the difficulty of obtaining valid and reliable measures of culture, especially at the macro level. Additionally, norm-based theories of corruption are often tautological, such that “a country has more corruption because its norms are more favorable to corruption” (Bardhan, 1997, p. 1331). Still, several correlates of corruption have appeared in the literature that are consistent, on their face, with a cultural relativist school of thought.

Ethno-linguistic fractionalization -- or the probability that two persons drawn from a population at random will not belong to the same group -- has been positively related to corruption (Mauro, 1995, Morris, 2004; Shliefer and Vishny, 1993; Treisman, 2000). Research indicates that corruption is lower in culturally homogeneous populations, as bureaucrats are likely to favor members of their own ethnic group (Mauro, 1995, p. 693). A nation’s dominant religion has also a significant impact on corruption levels. Treisman (2000) found that “hierarchal religions” (Catholicism, Eastern Orthodoxy, Islam) present less challenge to office holders, while, in the case of Islam, for example, the division between church and state may be blurred (p. 403. See also Paldam, 2001). Protestantism, on the other hand, with its values of egalitarianism

and individualism has been found to reduce corruption by acting as an “autonomous civil society” (p. 430). Treisman suggests that Protestant doctrine instills a distrust in state institutions in its congregates, which aids in exposing cases of corrupt behavior (2000, p. 421). Lastly, regional groupings of nations high on corruption rank order indices suggest a possible “subculture of corruption”; significantly higher perceptions of corruption have been observed in African, Latin American and post-Soviet nations (Montinola and Jackman, 2002; Moran, 2001; Xin and Rudel, 2004), although this may be confounded by factors such as slow development, bloated states sectors, a history of colonization, or other economic or political factors.

Emerging in part from the cultural relativist viewpoint, the neo-functional approach to the study of corruption introduces “efficiency-enhancing” models of corruption (Montinola and Jackman, 2002, p. 148). Under the neo-functional theoretical framework, corruption is a functional necessity, as governments, especially burgeoning democracies, are unable to provide basic services through legitimate means (see Leff, 1964). Much like the relativist argument, neo-functionalism disputes the application of Western norms, ideals, and legal culture to developing and transitional societies, suggesting that corrupt behaviors are inevitable by-products of modernization (Scott, 1972). According to this school of thought, corruption is seen as beneficial to development by “greasing the wheels of ineffective bureaucracies” (Jain, 1998, p. 26). The neo-functional models hypothesize that corrupt practices will “facilitate development and wane when countries reach a certain level of economic development” (Montinola and Jackman, 2002, p. 148). Empirical research has refuted this viewpoint.

Mauro found that, regardless of “red tape,” corruption deters economic growth by lowering the investment rate (1995, p. 695). Subsequent studies confirm that the net effect of corruption on economic development is negative (Mauro, 1998; Rose-Ackerman, 1999; Tanzi, 1997; Tanzi and Davoodi, 1997).

Several studies have examined the relationship between democratization and neoliberal free-market principles and corruption. Public choice theory (and what is roughly its micro-level counterpart, principal-agent theory) suggests that corruption will be reduced by economic deregulation and by political competition via the election process. Neoliberal policies of market competition (versus government intervention and regulation), measured as openness to trade, decreases corruption (Ades and DiTella, 1997; 2000; Gerring and Thacker, 2005; Sandholtz and Koetzle, 2000), while policies of “good governance”—accountability, transparency, openness, predictability, and rule of law have been linked to a reduction in corrupt activities within social collectives (Goudie and Stasavage, 1998). Transparency, accountability, and a strong civil society (such as a free press) further diminish opportunity structures conducive to corruption, for example, monopolistic government services (Montinola and Jackman, 2002; Rose-Ackerman, 1978, 1999). The stylized fact that poor nations tend to be more corrupt has led to the notion that, as these nations often have large, “cumbersome bureaucracies,” government size is related to corruption (Mauro, 1995, p. 706). In the literature, results on this point have been mixed. Montinola and Jackman (2002) and Husted (1999) found that the size of government, measured as the government share of the Gross Domestic Product (GDP), actually reduced corruption, while LaPalombara

(1994) reports the opposite.

The relationship between democratization and corruption, the theoretical foundation that most informs the current study, has also been mixed in the literature. For example, a linear, negative relationship between political democratization and corruption has been found (Goldsmith, 1999; Sandholtz and Koetzle, 2000; Xin and Rudel, 2004), while other researchers have found the inverse (Scott, 1972; Moran, 2001). Treisman (2000) found no significant relationship between corruption and present democratization, but rather, that the association is dependent upon the length of uninterrupted democratic rule, with twenty years being the minimum before any significant effect emerges. These mixed findings may be due to the functional form that the democracy-corruption relationship may take.

Montinola and Jackman (2002), using Bollens's (1993) measure of political democracy—freedom of group opposition, political rights, and legislative effectiveness - found that, during the post-1974 third wave of democratization (See Huntington, 1991), no relationship emerged between democratization and corruption. Only when a non-linear quadratic transformation was applied to the democracy measure did a significant association surface. Sung (2004), on the other hand, suggests that the democracy-corruption relationship takes on a cubic form. As nation-states move toward more open, predictable, and transparent policy-making, structured under the rule of law, corruption rates drop precipitously, but then appear to resurge. This may indicate a non-recursive relationship, where the causal arrow then flows back from corruption to democracy levels, dependent upon initial conditions, as in the case of

post-soviet Russia. Clearly, such findings warrant further investigation of the democracy-corruption functional form.

Additional socio-structural correlates of corruption found in recent literature include structural elements of the polity. For example, larger governments become more difficult to manage, providing more opportunity for corrupt acts due to the large amounts of impersonal dealings (Montinola and Jackman, 2002; Scott, 1972), as do federalist states (Goldsmith, 1999; Treisman, 2000). Natural resource endowments, for example the oil-rich Middle Eastern states or ore-rich former Soviet nations, provide sources of rents, as these commodities can be sold at a price that greatly exceeds the cost of extraction (Ades and DiTella, 1999; Fish, 2005; Fish, 2005; Lambsdorff, 1999; Leite and Weidmann, 2002; Mauro, 1997; Robbins, 2000; Treisman, 2000). Economic traits such as overall wealth per capita has been found to decrease corruption (Goldsmith, 1999; Xin and Rudel, 2004), while relative and/or absolute deprivation can be both a cause and consequence of corrupt administrations (Goudie and Stasavage, 1998; Lambsdorf, 1999). Finally, common law systems and a legal culture inherited by British colonization (Sandholtz and Koetzle, 2000; Treisman, 2000) reduces corruption through the emphasis on precedent and procedure.

It is noteworthy that a bulk of corruption literature appears in the disciplines of political science, public policy, and economics. Although corruption, as a crime of the powerful, influences and impedes economic development, weakens public trust and undermines political legitimacy, diverts spending designed to help the poor and reduce inequality, and erodes social justice (Morris, 2004; Zimring and Johnson, 2005), this

subject has been largely ignored by criminologists for theory-testing and theory-building. The proposed thesis seeks to fill this gap in the literature by testing a general theory of crime that, through an alternate articulation, proposes an explanation for corruption—Messner and Rosenfeld’s institutional-anomie theory.

Chapter Three

Theoretical Perspectives

Durkheim

Anomie theories assume conformity, that human beings are “basically social and compliant...*under normal conditions*,” (Paternoster and Bachman, 2001, p. 141, emphasis in original). In motivational theories such as anomie, we must account for rule *breaking*. The anomic paradigm in criminology can trace its theoretical roots to the work of French sociologist Emile Durkheim. Durkheim first introduced the concept of *anomie*, which typically refers to a societal condition where social norms are unclear or non-existent, in his doctoral dissertation *The Division of Labor in Society* (hereafter *Division*). In *Division*, Durkheim suggested that anomie was due to an “abnormal” form of the division of labor, brought about by the progression from the *mechanical solidarity* of simple societies to the more complex *organic solidarity* common in industrialized societies (1984, p. 301).

In simple societies, collective moral beliefs (generally centered on religion) yield a strong “conscience collective” that limits individual actions (Giddens, 1979, p. 30). As societies become more complex, labor becomes specialized and differences between individuals become more apparent. Rules, regulations, and “[s]olidarity among functionally differentiated parts must ultimately depend on mutual consensus concerning operating procedures” (Olsen, 1965, p. 39). According to Durkheim, an

anomic state occurs if “this regulatory process either does not exist or is not related to the degree of development of the division of labor” (1984, p. 303). Conditions of the abnormal, or “forced” division of labor include inequality, “class-wars,” crime, and “meaningless, routinized, and degrading” social functions (Willis, 1982, p. 107-108).

There is a large body of literature, including critiques, empirical evaluations, and extensions and elaborations of Durkheim’s division of labor thesis; five are briefly reviewed here. Two represent a general overview of cross-national findings based upon two different interpretations of Durkheim’s formulation. The other three take advantage of the natural experiment that is the Russian Federation.

Krohn (1978) examined Durkheim’s perspective at the cross-national level (N = 33) using population and urbanization measures to capture the moral density of a society and energy consumption as a proxy for industrialization. A division of labor measure developed by Gibbs and Martin (1962) captured the evenness of the distribution of individuals into various industrial categories; greater diversification indicated greater interdependence in a given society. Lastly, anomie was operationalized using Feierabend and Feierabend’s measure of systematic frustration—computed by subtracting the sum of the mean standard score of the following four variables: gross national product per capita (GDP) and the number of radios, newspapers, and telephones per capita, from the national literacy rate. Krohn’s initial model failed to support Durkheim’s thesis; however, when the (admittedly weak) anomie variable was removed, bivariate analysis showed an expected, moderate, and

positive relationship between population, moral density, a diversified division of labor, and both property and total crime rates across nations (1978, p. 665-666).

Messner (1982) argued that development will have no effect on homicide rates cross-nationally, as “societal development is usually accompanied by structural changes of an egalitarian nature which permit the bonds of organic solidarity to form” (p. 228). Messner’s model as a whole explains about 28% of the variance in homicide rates, with equality (measured as 1-Gini coefficient of income inequality) inversely related to homicide rates, consistent with the hypothesis that egalitarian trends promote organic solidarity. However, population has the opposite effect suggesting that rapid population growth may be “inherently destabilizing” in and of itself (p. 236).

Recent research has been able to take advantage of a unique natural experiment--the events that have occurred in Russia after the collapse of the Soviet Union, to test hypotheses derived from Durkheim’s social deregulation thesis. Kim and Pridemore (2005a) found that rapid socio-economic change increased homicide rates across 78 sub-national Russian regions (out of a total of 89 regions). Additionally, their research indicates that rapid political change (measured as the vote for opposition parties versus ballots for the Communist Party of the Russian Federation or the Liberal Democratic Party of Russia—parties that called for a return “to something resembling Communist or Soviet Rule;” (Pridemore and Kim, 2005b, p. 88) exerts a strong, positive influence on the change in post-1991 property crime rates. This relationship holds after controlling for socioeconomic indicators. The researchers interpret these findings as indicative of a short-term threat to Durkheim’s notion of “collective sentiments:”

[I]t is fair to argue that long-standing Russian cultural traditions included strong bonds based on collective sentiments, and the Soviet era resulted in ideologically rooted and exaggerated sentiments about the collective. Such cherished beliefs, according to Durkheim, are bound to elicit heightened passions when threatened (p. 99).

Using interrupted time-series analysis with the 1991 fall of the Soviet Union as the “intervention,” ARIMA modeling verifies that the increase in post-Soviet collapse homicide rates are not due to confounding influences (Pridemore, Chamlin, and Cochran, 2007). This lends further support for Durkheim’s thesis that rapid social change in a collective yields an increase in deviant behavior, as individual desires replace the collective, and the society struggles to adapt to new, and perhaps, unclear norms.

In *Division*, Durkheim argued that societal discordance is due to inadequate procedural rules. With Durkheim’s 1897 publication on suicide rates in France, anomie takes on a different meaning. In *Suicide*, Durkheim posited that the systematic and patterned nature of rates of suicide across social collectives suggested a socio-structural, rather than individual, explanation for this behavior. Durkheim developed a typology of suicides—egoistic, altruistic, fatalistic, and anomic -- the latter being the product of unfulfilled goals and aspirations. Given the “assumption that man cannot limit his ‘passions’” (Olsen, 1965, p. 40), Durkheim theorized that “society alone can play this moderating role; for it is the only moral power superior to the individual” (Durkheim, 1997, p. 252). Durkheim discovered that anomic suicides fluctuate with economic and political conditions, especially sudden change, when new rules for

interaction have not yet formed (Willis, 1982). Most interesting is that Durkheim found anomic suicide rates to increase not only during economic depressions, as may be expected, but also during periods of economic boom. According to Durkheim, booms and busts yield the same result, “because they are crises, that is disturbances of the collective order” (1997, p. 246). Giddens concludes:

Hence, the causative factor is not the material circumstances themselves, but the instability, which they introduce into social life. In circumstance of social disruption, the moral codes that customarily regulate individuals’ social activities are placed under strain, and tend to lose their hold (1979, p. 50).

In sum, anomie, as developed in *Suicide*, may be defined as “a condition of inadequate moral norms to guide and control the actions of people and groups in the interests of the total social system” (Olsen, 1965, p. 41). Durkheim views the anomie-crime relationship as normal, even beneficial in a society, as it strengthens the conscience collective:

Crime therefore draws honest consciences together, concentrating them. We only have to observe what happens, particularly in a small town, when some scandal involving morality has just taken place. People stop each other in the street, call upon one another, meet in their customary places to talk about what has happened. A common indignation is expressed (1984, p. 58).

Merton

If for Durkheim, deviance prevents anomie, for Robert K. Merton, anomie produces deviance. With the 1938 publication of “Social Structure and Anomie,”

Merton, argued that the variance in the rates of crime across social collectives could be explained by a society's "dominant cultural ethos," and what may be termed a "theory of social organization" (Messner, 1988, p. 38). Similar to Durkheim, Merton explains differences in crime rates across social aggregates in terms of the fundamental properties of social systems. According to Merton, societies, such as the United States, suffer from unusually high rates of crime due to the strong, universalistic emphasis placed upon monetary success goals, coupled with a weak emphasis on legitimate institutionalized means for achieving these goals. This configuration and its resultant state of malintegration leads to an anomic state that "favors the establishment of deviant normative structures and lifestyles" (Passas, 1997, p. 83).

For Merton, a healthy society is one in which goals and means are in equilibrium. An anomic society is characterized by malintegration. In the Mertonian explanation of anomie, then, it is the failure, not to regulate people's *goals*, but rather the *means* used to obtain these goals that become problematic (Paternoster & Bachman, 2001, emphasis added). Merton's theory of anomie is, then, based upon a disjunction between the goals that individuals set for themselves, (or rather, that society prescribes that they set for themselves), and the availability of legitimate means, or opportunities that are afforded to them (1938; 1968).

No true test of Merton's theory of social organization, or macro-level anomie, exists in the literature, although several studies have included variables that tap into constructs of inequality/deprivation consistent with the basic premise of anomie theory. For example, Blau and Blau (1982), using data for 125 metropolitan areas in the United

States, found that “income inequality in a metropolis *substantially* raises its rate of criminal violence” (p. 121, emphasis added). In their study, the Blau’s conceptualize anomie as a general state of “disorganization, distrust, and smoldering aggression which easily erupts into violence” (p. 123). The researchers measure this concept as family disruption (percent of population that is divorced/separated). The Blau’s conclude that relative deprivation, especially if ascribed, produces “the most fertile soil for criminal violence,” greater than absolute deprivation, measured as poverty, or cultural explanations such as the Southern culture of violence thesis (p. 122).

Recently, Baumer and Gustafson (2007), developed a precise causal model of Merton’s theory and tested classic anomie, integrated with tenets of Messner and Rosenfeld’s institutional-anomie theory (discussed below) using macro-level data from the General Social Survey (GSS). In their interpretation, instrumental crime is expressed as a function of cultural structure (societal emphasis on pursuing monetary success goals, and the emphasis of the collective on pursuing these goals through licit means) interacting with social structure (limited access to opportunities (means) of obtaining such goals) (p. 621).

Using 77 United States geographical areas described in the 1970’s aggregate version of the GSS, the researchers measured *commitment to monetary success* as agreement with the statement: “next to health, money is the most important thing. “Weak commitment to legitimate means was measure using agreement with the statement: “there are no right or wrong ways to make money, only hard and easy ways” (Baumer and Gustafson, 2007, p. 633). The extent of legitimate opportunities (“*limited*

job availability”) was captured by the ratio of the total number of persons employed/seeking employment to the number of jobs available in the local labor market area. Additional variation in opportunities was also measured (*low educational and economic attainment and educational and income inequality*). Institutional anomie theory (IAT) measures introduced into the study included the strength of the following institutions described in Messner and Rosenfeld’s theory—education, the family, and the polity; two other socio-structural variables were included to represent two additional institutions—religion and social capital. Net the effects of appropriate controls, the researchers found significant interactions between high commitment to monetary success and low commitment to obtaining this success through legitimate means, although limited and unequal opportunities failed to moderate this effect as suggested by Baumer and Gustafson’s reading of Merton. The need for “more clarification of [Merton’s] complex arguments, and additional work on translating the largely discursive statements into precise and testable causal models” was stressed (p. 655), as well as calls for further integration of the theories of the anomie paradigm.

Messner and Rosenfeld’s Institutional-anomie theory

In their contemporary elaboration of anomie theory in *Crime and the American Dream*, Messner and Rosenfeld (1994/2007) sought to expand upon Merton’s framework, attempting to explain the structural aspect of the theory beyond Merton’s stratification thesis based upon different causal dynamics. They look to the “patterned social relationships that ensure the basic survival requirements of the society are fulfilled, i.e. on *social institutions*,” and the imbalances that may occur between these

institutions, as an explanation for the cultural orientations that favor criminal behavior (Messner, 2003, pp. 4-5, emphasis in original). The result is an institutional-anomie theory of crime (hereafter IAT).

True to Merton (1938), Messner and Rosenfeld (2007) theorize a “dark side” to the mythos of the American Dream. They define the American Dream as “a commitment to the goal of material success, to be pursued by everyone in society, under conditions of open, individual competition” (p. 68). According to Messner and Rosenfeld, four core values underlie this defining characteristic of American culture: (1) an “*achievement orientation*... [where] failure to achieve readily equates with a failure to make any meaningful contribution to society;” (2) *individualism*, where people are encouraged to “‘make it’ on their own;” (3) *universalism*, where all members of society are expected to strive for the same goal, regardless of the availability of the means to achieve those goals; and (4) “the *fetishism of money*,” where money is “the metric of success” (p. 69-70, emphasis added). These value components comprise a “dominant cultural ethos” of American society that places a strong emphasis on “making it” (i.e. monetary success), coupled with a much weaker emphasis on the licit means of achieving these goals (Messner, 2003, p. 3).

Using the United States as the archetypal case, Messner and Rosenfeld posit that a climate of competition, individualistic achievement orientation, and pressures to accumulate wealth “by any means necessary,” yields a state of structural strain. This is due, in part, to the consistent emphasis and reinforcement of the monetary success-oriented culture (through outlets such as mass media and advertising), while, at the

same time, equal weight is not given to the legitimate channels that allow these objectives to be realized (mainly education and employment opportunities). This malintegration of goals and means is a direct theoretical descendant of Merton's theory of social organization; the consequence of this disjunction is anomie. Under this condition, a breakdown occurs in the normative social controls that promote conformity, as individuals are unable to attain culturally prescribed success goals when the opportunities to do so are beyond their grasp. Anomic societies are criminogenic because "people faced with this contradiction between cultural mandate and structural impediment are subject to pressures, or 'strain' to abandon legal but ineffective means of goal attainment in favor of illegal, effective ones" (Messner and Rosenfeld, 2007, p. 58).

This cultural ethos does not exist in a vacuum; it is expressed in the social structure of a given collective—"structural arrangements that encourage and presuppose" these cultural orientations (Messner and Rosenfeld, 2007, p. 74). Messner and Rosenfeld expand anomie theory beyond mere cultural analysis and stratification. Institutional-anomie theory examines the interplay between four primary institutions in light of the collective culture of a society. Messner and Rosenfeld focus on four elemental institutions found in social collectives. The *economy* functions around the production of goods, trade, and distribution, providing the basic requirements for sustenance: food, clothing, shelter. The *polity* is responsible for the safety and security of its citizens from foreign and domestic threats and provides a forum that "mobilizes and distributes power to attain collective goals." The responsibility of the *family* is

twofold, “regulat[ing] sexual activity and the replacement of members of society,” as well as providing a buffer to and “refuge from the tensions and stresses generated in other institutional domains.” *Education* provides additional socialization skills, preparing children for future occupations, as well as expanding the knowledge base of the citizenry (Messner and Rosenfeld, 2007, p. 72.)

These institutions are to some degree interdependent and coordinated, held in balance by the values of the collective populace. For example, the economy is dependent upon “human capital” produced by the educational system, which is, in turn, dependent upon the early socialization of students by their respective families, or “cultural capital” (Messner and Rosenfeld, 2007, p. 73). The functions of social institutions are influenced by the culture of the collective, while, at the same time, these institutions “reproduce and sustain cultural commitments...ultimately, where culture ‘comes from’” (p. 74).

Messner and Rosenfeld posit initially that, when this “institutional balance of power” is tipped so that the economy dominates over non-economic institutions, those weakened institutions lose their ability to control the populace (2006, p. 130-131), resulting in a state of normlessness, or anomie (Messner, 2003; Messner and Rosenfeld, 1994/2007; 1997; 2006). The economy may dominate and tip this “institutional balance of power” through three processes. The first of these mechanisms is *devaluation* of non-economic institutions. For example, education is regarded as a means to earn a degree to obtain employment or to learn a marketable skill, rather than knowledge for its own sake. Likewise, the family’s “breadwinner” is valued over the homemaker or

caregiver, and politics is left to the career politician rather than the average citizen (Messner and Rosenfeld, 2007, p. 76-79). A second way that the economy dominates is through *accommodation*. For example, in the United States, long work schedules and overtime is valued, while family and parental leave is given, but often without pay. Messner and Rosenfeld note that “parents worry about finding time for their families, few workers must ‘find time’ for their jobs. On the contrary, many feel fortunate that the economy has found time for them” (p. 79). The final manifestation of economic dominance is through *penetration* of “economic norms” into non-economic institutions. Education becomes a commodity, while “within the polity, a ‘bottom-line’ mentality develops” (p. 83) with notions that government would be more effectively if run like a business.

Since the original 1994 publication of *Crime and the American Dream*, Messner and Rosenfeld have elaborated upon the idea of institutional-anomie theory to suggest alternative configurations of the “institutional balance of power” (2001; 2004; see also Rosenfeld, 2004). The first type, exemplified above, of a strong free-market economy as dominant, with non-economic institutions weakened or subsumed by the strength of the economy, leads to high levels of “individualistic predatory crime,” including, but not limited to, offenses of theft, burglary, and homicide. A second arrangement occurs when civil institutions such as religion dominate. Here the rules favor “in-group loyalty and protection of honor,” producing high levels of “crime-equivalents” such and human and civil rights violations. A third configuration may occur when the state dominates. Here, using a game analogy, they suggest that “high priority is given to the rules for the

exercise of power... [resulting in] high levels of corruption and related forms of manipulation of personal relationships for unfair advantage” (Messner and Rosenfeld, 2004, p. 96). This latter articulation is the focus of the proposed thesis.

In sum, Messner and Rosenfeld’s (1994/2007) institutional-anomie theory states that dominance of the economy coupled with weakened non-economic normative controls through the three processes described above, along with an exaggerated emphasis on an “unrestrained pursuit of economic achievement,” lead to a Mertonian anomic state, as manifested by the disproportionately high crime rates in the United States (p. 84). They do, however, acknowledge that other “rules of the game” may be at play in the dominance of other institutional entities, resulting in the rise of different types of crime. Thus, it is institutional imbalance *per se*, rather than strictly economic dominance, that IAT proposes leads to crime. The literature, however, has narrowly focused on this configuration and on street crimes, conventionally defined. This serious limitation robs IAT of full analysis of its scope and generalizability.

In fact, to date few empirical tests of institutional-anomie theory have been published. Messner and Rosenfeld suggest that this is due to the high level of abstraction that “enhances the scope of IAT, [but] renders empirical assessments difficult” (2006, p. 131). For example, how does one operationalize an “institutional imbalance of power” or “dominant cultural ethos”? Messner admits, “[T]ranslating the abstract theoretical claims of IAT into specific empirical propositions is thus a challenging, if not daunting task” (2003, p. 9). This ambiguity of operationalization and measurement calls into question whether IAT can be subjected to falsification (Chamlin

and Cochran, 2007). Furthermore, the theory is not amenable to direct testing due to the necessity of employing indirect measures of key theoretical constructs. This drawback is not unique to IAT, rather, it is common amongst the majority of macro-level theories, especially when cast at a high level of aggregation. Chamlin and Cochran note that it is possible to evaluate macro-social theories if, following Blalock (1967), “one can make predictions about the relationships between structural predictors and rates of behavior that distinguish it from all other competing theories” (Chamlin and Cochran, 2007, p. 42). They do so in their initial evaluation of IAT by the inclusion of cross-product terms to evaluate conditional relationships between the economy and non-economic institutions. The findings of Chamlin and Cochran’s (1995) partial test of IAT (to be discussed in detail shortly) support their hypotheses that institutional anomie theory “*uniquely predicts* that the effect of economic conditions on profit-motivated crime depends on the strength of noneconomic institutions” (Chamlin and Cochran, 2007, p. 42, emphasis added).

On a cross-national level, support for or against institutional-anomie appears to depend on the nations included in the sample. Messner and Rosenfeld state that “comparisons of *developed* societies of the world prompt the question of why the rates of serious crime are so surprisingly high in one: the United States” (2007, p. 21, emphasis added). In their critical evaluation of IAT, Chamlin and Cochran (2007) question this restriction, citing that there are no inherent practical or theoretical reasons for excluding less developed nations. Indeed, their analysis of mean homicide and robbery rates for a developmentally diverse sample of nation-states showed that

the rate of serious crime in the United States only appeared “exceptional” if compared against a sub-sample of Western European countries. Messner and Rosenfeld counter that, although nations such as the Russian Federation have exceeded the United States in overall levels of crime, “what seems to be the most distinctive about crime in the United States is its unrestrained and dangerous character” (2007, p. 21), citing the American proclivity for firearms. Nonetheless, the greatest empirical support for the theory arises from tests of nation-states at similar levels of industrial advancement, which limits IAT’s generalizability (Chamlin and Cochran, 2007; Trent, 2007).

Additional criticisms of IAT include: (1) the possibility that its scope may be limited to instrumental crimes (Chamlin and Cochran, 1995); (2) the concept of “economic dominance” is too vague to measure across different cultures both within and across nations; (3) IAT fails to incorporate in its analysis variables central to other macro-level theories of crime, instead relying on a universal shared value system based upon economic roles, risking possible spurious relationships (Jensen, 2002, p. 55-56); and (4) it may be “oversocialized,” highlighting Durkheimian sociology while ignoring “the genius” of Merton’s theory of deviant motivation (Bernberg, 2002, p. 739). This latter criticism suggests articulating IAT through a multilevel lens (see Baumer, 2007 for a multilevel model of Mertonian anomie theory that may be able to inform a possible MLM interpretation of IAT).

The bulk of extant research has sought to use institutional-anomie theory to assess the effects of socio-structural and institutional dynamics on crime rates. Only a limited body of research has looked at the value orientations resulting from the

“American Dream” and the cultural dynamics at work (Cao, 2004; Chamlin and Cochran, 1997; 2007; Cullen, Parboteeah, and Hoegl, 2004; Jensen, 2002; Muftić, 2006). This has resulted in incomplete, partial tests of IAT due, in part to the aforementioned difficulty in operationalizing and measuring the dominant cultural orientation of a social collective. This synthesis of ideas is necessary in order to lend support to, or dispel the “myth” of, American exceptionalism (Messner and Rosenfeld, 2006).

Institutional-Anomie Theory and Cultural Dynamics

In *Crime and the American Dream*, Messner and Rosenfeld ground their theory on a basic premise of Mertonian anomie theory—that the exaggerated emphasis placed on pecuniary success, countered with only a weak emphasis on the importance of legitimate means to achieve these success goals leads to a state of anomie. Not only is this “a normal feature of American culture,” Messner and Rosenfeld argue, “it is an integral part of the American Dream” (2007, p. 11). This “anomic quality of life” is put forth as an explanation of why the rate of violent crime in the United States consistently exceeds that of other, similarly situated industrialized nations (p. 12, 25).

To date, few empirical studies have examined the effects of the conflict between cultural values emphasizing material success and the available means to achieve these ends. Four studies that have addressed this thesis of IAT have turned to comparative, cross-cultural analysis. Jensen (2002) and Cao (2004) examined the comparative cultural dynamics of materialism using items from the World Values Survey. This instrument taps into individual opinions on family, work, religion, and success goals. Jensen assessed the premise of American exceptionalism as an explanation for the

United States' relatively higher homicide rate. He found no support for the notion that the United States is inherently more criminogenic nor for the decommodification hypothesis as suggested by Messner and Rosenfeld (1997). Jensen suggests that theories focusing on "variation, diversity, and conflict as opposed to economic dominance" can explain both crime rates and policies at the cross-national level (p. 69).

Similarly, Cao's (2004) research focused on Merton's premise that American culture is more anomic than other societies, a proposal extended in the work of Messner and Rosenfeld. Cao used the summed score of six items from the World Values Survey as a proxy operationalization of anomie (justification of: claiming government benefits without entitlement, avoiding fare on public transport, cheating on taxes, knowingly purchasing stolen goods, accepting a bribe, and failing to report accidental damage to a parked vehicle). Similar to Jensen (2002), Cao found no support for American exceptionalism in the data, controlling for social and demographic covariates.

Chamlin and Cochran (2007) utilized two items from the World Values Survey, "income is the most important feature of work" and "less emphasis on money and material possessions is good," as indicators of materialistic values. Additionally, their sample included developing and transitional nation-states that were omitted from prior cross-national tests. They found that "while the official homicide and robbery rates for the USA are substantial, they are not exceptional" (p. 46). In addition, the United States did not rank highest on the World Values Survey measures included, inconsistent with IAT, such that "when compared to a larger and more heterogeneous...sample of countries, we find no evidence in support of Messner and Rosenfeld's core assumption

that American culture places an unparalleled emphasis on the acquisition of goods and services” (p. 53). Furthermore, institutional-anomie appears only to hold for advanced industrialized nations.

In the final cross-national study of IAT’s cultural thesis, Cullen, Parboteeah, and Hoegl (2004) applied basic tenets of IAT to managerial ethical reasoning at the cross-national level, again using World Values Survey data. Using hierarchical linear modeling for individual- and aggregate level- data on 3450 managers from 28 nation-states, the researchers found general support for both IAT’s cultural and structural premises as predictors of managerial willingness to justify ethically suspect behavior. This study provides the first possible confirmatory link between the dynamics of IAT at the level of the social aggregate and that of the individual. Unfortunately, criminological research has not yet attempted to replicate these findings on instrumental crime, perhaps due to biases within the discipline in general, and anomie theories in particular, to keep micro- and macro- level articulations of theory distinct (Baumer, 2007, c.f. Agnew, 1987; Bernard, 1987. See also Messner, 1988).

In a study that integrated both institutional and cultural dynamics consistent with institutional-anomie theory, Muftić (2006) attempted to broaden the theory’s analytic scope, examining institutional and cultural values at the micro-level. While institutional-anomie theory was introduced as a possible explanation for serious crime, Muftić investigated a minor form of deviance—student cheating. She rationalized this choice stating that “student cheating is one form of instrumental offending because it provides the student a type of nonmonetary reward...[g]rades may also be viewed as

the currency of academia” (p. 635). This appears to agree with the spirit, if not the letter, of institutional-anomie theory.

Muftić tested the hypothesis that U.S. born students will adhere to the materialistic values of the American Dream and have a higher likelihood of cheating than non-U.S. born students. Additionally, those students involved in the economy (working outside of school) will be more success-oriented and more likely to cheat. Finally, students who are involved in non-economic pursuits (family, education, polity) will be less likely to engage in cheating, as these institutions will moderate the effects of the economically dominant society (2006, p. 636-637).

Support for institutional-anomie was mixed in this study. As predicted by theory, students who adhered to the cultural values of the American Dream were more likely to cheat, although this was not universal for U.S. born students. Moreover, those students who worked outside of school (actively participating in the economy) reported significantly lower instances of cheating. This was interpreted by the researcher as contrary to institutional-anomie theory. Finally, neither interaction effects (moderation) nor mediation by non-economic institutions emerged as significant for this sample. Muftić claims this may be due to sample size ($N = 162$), although this N is actually larger than the majority of studies of IAT. (p. 649). Due to study limitations and methodological issues in this study, it is not clear then at this time if IAT is applicable at the micro-level or as an explanation of minor forms of deviance. Indeed, nothing in the literature suggested that IAT was intended to explain individual variation or minor deviant behaviors.

Finally, Chamlin and Cochran (1997) looked at social altruism, defined as “the willingness of communities to commit scarce resources to the aid and comfort of the members, distinct from the beneficence of the state” (p. 204). Consistent with the cultural aspect of institutional-anomie theory, along with Braithwaite’s theory on reintegrative shaming (1989) and Cullen’s social support theses (1994), Chamlin and Cochran hypothesize that communities that place greater emphasis on volunteerism and charitable contributions enjoy lower rates of both violent and property crime (p. 209-211).

Social altruism was measured as the ratio of United Way contributions to aggregate income in 354 United States cities. The researchers controlled for both absolute and relative economic inequality, urbanism and opportunity measures, and demographic variables (1997, p. 211-212). They found that, consistent with “the logic of institutional-anomie theory,” charitable contributions are inversely related to both violent and property crime rates, suggesting “communities that effectively teach their members to respect and engage in behaviors that promote the welfare of others enjoy relatively lower rates of crime” (p. 220-221).

Empirical Tests of Institutional-Anomie Theory

In an analysis of the relationship between social institutions and crime rates, Chamlin and Cochran (1995) published the first empirical test of institutional-anomie theory using the 50 United States as the unit of analysis. They noted that a comprehensive test of both core tenets of the theory—culture and social structure—would be difficult, if not premature at the time of their research (p. 415). Measures of

cultural dynamics for the United States were unavailable and, therefore, their research focused on the structural effects of economic and non-economic institutions on four profit-oriented crimes: robbery, burglary, larceny, and auto theft, measured as aggregate crime rates for 1980.

While *Crime and the American Dream* (2007) laid a foundation for a socio-structural analysis of crime rates, the authors do not provide detailed operationalizations of these constructs, nor do direct measures of these theoretical assumptions exist (Piquero and Piquero, 1998). Chamlin and Cochran (1995) operationalized economic deprivation as the “structured opportunities to acquire wealth rather than the level of inequality within a collectively” (p. 417), using percentage of families below the poverty line as a measure of absolute economic deprivation. The strength of non-economic institutions (as buffers against the anomic effect of economic deprivation) was operationalized by three measures: ratio of yearly divorces to marriages per 1,000 (family disruption), adjusted church membership rate per 1,000 (strength of religious organizations), and percent of persons of voting age who cast ballots in the 1980 congressional elections (strength of the polity). Recall that these institutions are interdependent and that institutional-anomie hypothesizes that a strong free market economy *coupled* with the weakened ability of the non-economic social sector to fill a normative role leads to the anomic state (Messner and Rosenfeld, 2007). To capture this interaction the researchers added three product terms: poverty*family, poverty*religion and poverty*polity.

Chamlin and Cochran found that the additive effect of the independent variables

explained 96% of the variation in profit-oriented crime across the 50 states. With the introduction of each product term into the regression model, the explained variance increases 2%, lending support to Messner and Rosenfeld's theory. This interaction effect is a key contribution and assessed in all subsequent tests of institutional-anomie theory; Chamlin and Cochran noted that "it appears that the interplay between economic and other social institutions determines the level of anomie within a collectively and, in turn, the level of crime" (1995, p. 423).

In their second empirical test of institutional-anomie theory, Messner and Rosenfeld (1997) examined the effects of decommodification on homicide rates cross-nationally. They hypothesized that, similar to the restraining effect on the market by non-economic institutions, IAT can be expanded based partly upon Gøsta Esping-Anderson's research on Social welfare systems (1990). Messner and Rosenfeld apply Esping-Anderson's concept of the "decommodification of labor," or public policies through which "a person can maintain a livelihood without reliance on the market" (Esping-Anderson, 1990, p. 22), to cross-national crime rates.. Messner and Rosenfeld looked at three "essential dimensions of entitlements...ease of access to them, their income replacement value, and the range of social statuses and conditions they cover" (1997, p. 1395), and applied this notion of decommodification to institutional-anomie theory. These social welfare policies provide a bulwark to harsh economic dominance that, they believe, contributes to an anomic state and, thereby, crime.

As Esping-Anderson's original study only contains data for 18 capitalist nations, Messner and Rosenfeld developed a proxy measure of decommodification so that a

larger sample of nations could be analyzed ($N = 45$ maximum). Based upon International Labor Office data, this proxy measure is comprised of three indicators of national expenditures: average annual welfare benefits per household, social security expenditures as percent of gross domestic product, and percent of expenditures allocated to worker's compensation (p. 1400). The researchers' dependent variable was lethal violence, measured as multi-year homicide rate averages.

The study supported this precept of institutional-anomie theory, such that, across various model specifications (exclusion of Syria as a possible outlier and a smaller sub-sample of 39 nations with complete data across all variables), nations exerting greater political restraint of the market through social welfare programs and expenditures have reduced overall levels of homicide. In sum, Messner and Rosenfeld's model explains between 32.6% and 48% of the variance in homicides cross-nationally (p. 1404), while advising that future tests of their theory should include non-economic social institutions such as family, religion, and education (p. 1408).

While Messner and Rosenfeld provided the first cross-national test of a facet of institutional-anomie theory, Piquero and Piquero (1998) provide the first test using both varying operationalizations of the strength of two non-economic institutions, along with assessing the effects of all four institutions identified in *Crime and the American Dream* on both violent and property crime rates.

As a form of sensitivity analysis, Piquero and Piquero (1998) performed separate multivariate analyses, first operationalizing polity as percentage of population receiving public aid (a decommodification-type proxy measure) and second as percent of citizens

voting for in the 1988 presidential election (as a measure of public involvement in government). The researchers represented the strength of education using three variables: proportion of population enrolled in college, percentage of high school dropouts, and competitiveness of teacher's salaries when compared to the population's average annual pay (p. 69-70). Family disruption was measured by the percentage of single-parent households; percent of population below the poverty level represented the economic dominance construct. Three interaction terms were introduced to the model to evaluate the "interplay" between the economic and non-economic institutions (p. 72).

Regression analyses of the varying specifications yield mixed support for institutional-anomie theory, with the alternative specifications of polity and education failing to reach statistical significance in one model, and contradictory results found in other models. The researchers suggest that "deciding how to indirectly measure variables must be undertaken with extreme caution and respect for alternative specifications...the conclusions one draws from an indirect empirical test is extremely sensitive to the operationalizations of key variables" (p. 80). Indeed, one of the foremost challenges of empirically testing institutional-anomie theory stems from "conceptual clarification and measurement". As stated by Messner (2003), "IAT employs concepts that are highly abstract and amenable to alternative interpretations. Such concepts can be rich in meaning, but they defy easy operationalization" (p. 15).

Savolainen (2000) examined institutional-anomie theory cross-nationally using data from Messner and Rosenfeld's 1997 study; he also tested the reliability and validity

of his findings on a different sample of nations ($N =$ maximum of 45) with partially different measures (p. 1027). The most significant contribution of this parallel sample is the inclusion of seven post-Soviet/ Warsaw Pact nations in transition to market economies. Savolainen, as an extension of Messner and Rosenfeld's (1997) hypothesis that decommodification of labor tames the harsh anomic state caused by the free market economy, tested the effects of both the proxy decommodification index and welfare expenditures on homicide rates disaggregated by gender.

Overall, the findings for the male and female homicide rate were substantively the same. Consistent with institutional-anomie's decommodification hypothesis, nations high on welfare spending have "a very small or nonexistent underclass population" (p. 1037), alluding to the interaction effect between income inequality and the strength of non-economic normative controls. Thus, Savolainen found support for the moderating effects of both decommodification (explained variance of 32% to 51%) and welfare spending (explained variance 38%-76%) on homicide rates (p. 1032-1034).

Point estimates for the conditional effects of inequality were calculated for Finland (a welfare state) and Mexico (which scored -12.9 on the centered measure of welfare spending in these data). Consistent with IAT, the point estimates for Mexico equaled 4.5 (male homicide rate) and 4.91 (female homicide rate), while the predicted values for Finland were -5.34 and -6.54, respectively. The latter seems counterintuitive, suggesting that income inequality may actually lower the level of homicide, but Savolainen notes that this is consistent with the *maximin* principle theorized in the work of John Rawls (1972). This principle proposes that "a just society is one that maximizes

the well-being of the worst off”, such that “income inequality, however large, may be acceptable, insofar that it stimulates hard work, innovation, and economic productivity in general, and, by way of tax revenues, improves the situation of the poorest segment of society” (Savolainen, 2000, p. 1035-1036).

Pratt and Godsey (2003) reported results similar to Savolainen using cross-national sampling and homicide rates as the dependent variable. This study integrated key concepts of Cullen’s social support theory (1994) with Messner and Rosenfeld’s concept of decommodification derived from institutional-anomie theory. Using percentage of gross domestic product allocated to health care expenditures as a measure of social support, and inequality measured as the ratio of the median incomes of the richest to the poorest 20% of citizens, the researchers found that the main effects of these key covariates remain statistically significant when controlling for the effects of each. Additionally, these measures interact ($\beta = -.359, p < 0.05$), indicating that the criminogenic effects of inequality are reduced by high levels of public social support (Pratt and Godsey, 2003, p. 626). This moderating effect is consistent with the predictions of both theories. Moreover, this relationship holds under different sampling methods and different modeling conditions to test for spurious relationships. Pratt and Godsey provide possible policy implications, such that “increases in levels of social support are capable of producing a concomitant reduction in crime rates even in the absence of a social and economic revolution, and that higher levels of social support can help to reduce the harmful effects of economic inequality on crime” (p. 631).

In a similar vein to the preceding examinations of the effects of

decommodification on homicide rates cross-nationally (Messner and Rosenfeld, 1997; Pratt and Godsey, 2003; Savolainen, 2000), Batton and Jensen (2002) examined the effects of decommodification on homicide rates sub-nationally using United States data. Using time-series analysis, this study analyzed homicide rates for 1900 to 1997 and the effects of a time-series decommodification proxy measure, controlling for inflation and value of the U.S. dollar (p. 16). This study is unique among the empirical tests of institutional-anomie theory in that it examines historical trends and “[t]he degree to which economic fluctuations affect other institutions and relations...related to the level of control the state exercises over the economy and the extent to which it attempts to mediate the effects of economic fluctuations” (p. 7).

While it has been noted that tests of institutional-anomie theory should assess the relationship between economic and non-economic institutions cross-nationally, Batton and Jensen rejoin, “national data obscure differences that may exist at local, state, and regional levels” (2002, p 14). They argue that city or county level studies might facilitate a more in-depth discussion of the decommodification-homicide relationship by allowing for comparisons between rural and urban areas, which often experience shifts in market forces differently because of employment in difference segments of the labor force (2002, p. 14).

Additionally, changes in the relations between capital and labor over time should be related to changes in the crime rate over time both across and within social collectives.

The key finding of Batton and Jensen’s (2002) research was the mixed results of the effects of decommodification on homicide rates over temporal variation. For the

period 1900 to 1945, their results generally support institutional-anomie theory; however, these results do not carry over to the latter period 1946-1997, which they believe suggests that a “turning point” manifests in the post-WWII period (p. 28-29). To date this study has not been replicated in other social aggregates or other historical periods and remains the only time-series treatment of IAT. This is a serious limitation in the evaluation of this theory since Messner and Rosenfeld acknowledge the value of “historical research that encompasses time periods long enough to insure genuine institutional change” (p. 99).

Several other empirical tests of institutional-anomie theory have focused on within-nation analysis. Hannon and Defronzo (1998) examined public assistance as a possible buffer to the strain caused by “true disadvantage” in a sample of United States counties. Their analyses explain 71% of the variation in overall crime rates, 68% of property crime, and 63% of violent crime (p. 387). The researchers interpret these high level of explained variance as both support for traditional anomie/strain theories, such that “welfare allows recipients to legally obtain culturally defined goals, thus reducing criminogenic frustration” (p. 389), and for institutional-anomie theory. Welfare allows people to maintain a standard of living free of the market, thus lowering levels of anomie and allowing social institutions to provide their normative functions.

Stucky (2003) focused on one institution described by Messner and Rosenfeld’s theory—the polity -- through an integration of institutional-anomie and social disorganization theories. He hypothesized that “local politics can affect minority representation, responsiveness of the city government to organized groups within the

city, and policy outcomes” and will have a negative affect upon violent crime rates (p. 1115). Direct and conditional effects were found, such that district-based political representation and cities with African-American mayors reduced crime, while the effects of poverty and family disruption were moderated by the strength of mayor-council type governmental structures. Stucky interprets this as both support for social disorganization theory and Messner and Rosenfeld’s theses on the strength of the polity found in institutional-anomie theory.

A recent study by Cancino, Varano, Schafer, and Enriquez (2007) continued this vein of theoretical integration by combining tenets of social disorganization theory with IAT in the context of the systemic network thesis. Their study focused on community-level characteristics in a predominantly Latino urban area on the outcome variables of both violent and property crime rates. Cancino et al. found support for both social disorganization and IAT, determining that the two theories “can be viewed as supplementary...provid[ing] a more refined picture that explains crime” (p. 80).

Maume and Lee (2003) assessed the relationship between social institutions and crime and a sub-national level, with counties treated as cases. The researchers examined both instrumental (profit-motivated) and expressive homicides, hypothesizing that institutional-anomie will better explain the former (p. 1145). It is noteworthy that this is the first study since Chamlin and Cochran’s (1995) partial test of institutional-anomie theory to look all four institutions identified by Messner and Rosenfeld—economy, polity, family, and education; along with religious adherence (as first suggested by Chamlin and Cochran, 1995), and political market restraint (Messner and

Rosenfeld, 1997). Inequality (Gini coefficient) was used to measure economic dominance; polity is operationalized as voter participation, family disintegration by divorce rates. Educational expenditures and adherence to religious denominations were measured to “tap into cross-community variation in support for non-economic institutions” (p. 1155), and a decommodification proxy measure, welfare expenditures, was added to the model. While prior research suggests that non-economic institutions moderate the effects of the economy on crime rates, Maume and Lee’s study represents a divergence, suggesting another possible causal link—mediation (p. 1147).

Recall Messner and Rosenfeld’s argument that for societies where the economy is dominant, a shift in the “institutional balance of power” may devalue, accommodate, and penetrate non-economic institutions (2007, p. 76-83). In an attempt to integrate institutional-anomie theory with Marxist criminology, Sims (1997) suggested that “social institutions are restricted by the economic base in the degree to which they can shift and change” (p. 9). She also argued that “*imbalance* [is] a logical result of a capitalist economic mode of production” (p. 13, emphasis in original). Maume and Lee extend this point, stating, “the characteristics of the economy in a social system not only shape the character of social institutions, but also...the economy will continue to have a direct impact on how other institutions function and are able to effectively control criminal behavior” (2003, p. 1148). They introduced a second causal link where the strength of non-economic institutions, undermined by the dominance of the economy, directly affect, or partially mediate the effect of the economy on, crime rates (p. 1149).

Where prior tests of IAT have found moderating effects, whereby the effects of

the non-economic institutions on crime rates is dependent upon the level of economic dominance in a given social collective, Maume and Lee's study supports mediating effects of the non-economic institutions on the economic-crime relationship. Under mediation, rather than a simultaneous "interplay" between the social institutions, a causal chain is in effect. The introduction of the non-economic institution variables into the negative binomial regression model reduces the criminogenic effects of the economic dominance proxy (Gini coefficient). Only one measure, the decommodification proxy, exhibits both mediation and moderation. Lastly, the researchers found their model to particularly salient for profit-motivated homicides; the inclusion of the non-economic measures reduced the direct effects of economic dominance on homicide rates by 43.2%.

Following prior sub-national studies, Kim and Pridemore (2005a), using regional data, applied institutional-anomie to transitional Russia. They sought to explain the increase in interpersonal violence that followed Russia's conversion to a free market economy (p. 1378), thus creating a "bridge" between studies tested in the United States and cross-national tests of Messner and Rosenfeld's theory. Additionally, drawing from Bernberg's (2002) theoretical examination of institutional-anomie theory and consistent with the Durkheimian version of anomie theory, Kim and Pridemore suggest that we should "expect similar conditioning effects of [non-economic] institutions on *any association between social change and crime*" (p. 1382, emphasis added). Russia's move toward capitalism, coupled with the likelihood that its citizens have begun to adopt the "American Dream" as the "Russian Dream," could in part explain that nation's

rising crime rates.

Kim and Pridemore operationalized institutional-anomie variables similar to prior research (Chamlin and Cochran, 1995; Maume and Lee, 2003), creating an economic strength factor, along with family stability, educational strength, and political involvement. Using negative binomial regression techniques, homicide rates were regressed on poverty, social institutions, and socioeconomic change variables. Following what has become convention in IAT studies, interaction terms were also included in the model. The researchers found support for the Durkheimian social deregulation model as suggested by Bernberg (2002); regions experiencing the worst effects of rapid socioeconomic change also reported the highest homicide rates (Kim and Pridemore, 2005, p. 1391). They did not, however, find support for the hypothesis that non-economic institutions moderate the effects of the dominant economy, with none of the interaction terms reaching statistical significance. This may suggest that institutional-anomie theory fails to account for rapid change, and that “any potential conditioning effects of social institutions simply may be overwhelmed because the changes were so strong and so swift in Russia” (p. 1393). In a related study, the researchers tested IAT to account for serious property crime in Russia (Kim and Pridemore, 2005b), but again found support for a Durkheimian interpretation of anomie, rather than IAT.

The study that most closely informs the current proposal is Schoepfer and Piquero’s (2006) examination of the applicability of institutional-anomie theory on white-collar crime. Following Edelhertz’ definition:

an illegal act or series of illegal acts committed by nonphysical means and by concealment or guile to obtain money or property, to avoid the payment or loss of money or property, or to obtain business or personal advantage, the researchers hypothesized that white-collar offenses “focus on personal or organizational gain and therefore are well suited to be studied within the IAT framework” (p. 228). Indeed, institutional-anomie theory suggests a cultural ethos whereby it is always possible to obtain more material wealth; the researchers suggest that this speaks to the applicability of institutional-anomie theory as “derived from the *motivations* of offending” (p. 203, emphasis added). Based upon Uniform Crime Report data, they looked at a single offense—embezzlement, as it fits into Cressey’s general definition of “a quintessential white-collar crime” (p. 233). The researchers also cite previous research that puts forward the opinion that this particular class of “suite” offenders has much in common with street offenders (p. 231).

While generally supportive of institutional-anomie theory, Schoepfer and Piquero found the effects of unemployment to be significant predictors of embezzlement, but in the opposite direction than that hypothesized by IAT. This is intuitive. The very nature of the offense studied, embezzlement, presupposes that the offender be employed. The researchers caution that when examining white-collar offenses, economic variables such as unemployment should be handled as opportunity controls rather than economic disadvantage measures (p. 233). Overall, despite limitations such as measurement issues of both the independent and dependent variables, coupled with the previously discussed difficulty in operationalizing IAT

measure in general, this study fills a gap in the literature similar to the study proposed herein.

Alternate configurations of institutional imbalance

The overarching trend in the aforementioned research indicates that economic dominance, coupled with enfeebled non-economic institutions incapable of exerting their normative controls leads to anomie, which, in turn, results in high crime rates across social collectives. Messner and Rosenfeld note that “the principal claim of institutional anomie theory is that institutional imbalance *per se*, and not simply dominance of the economy” (2001, p. 155, emphasis in original) is responsible for these high crime rates. As previously touched upon, other “rules of the game” exist, whereby “analytically distinct configurations that reflect differences in the institutional balance of power” predict different types of crime (Messner and Rosenfeld, 2004, p. 96). Table 2 displays these configurations.

Table 2: Crime types by dominant institution and cultural conditions

Dominant institution	Cultural condition	Predicted crime
Economy	Anomie	Instrumental crime
Civil (i.e. religion, ethnic, kinship)	“Hypermoralism”	“Crime equivalents”
State	Moral cynicism/withdrawal	Corruption

In societies with strong civil institutions, such as kinship systems, ethnic fractionalization, or religion, dominance may lead to “a kind of extreme moral vigilance or *hypermoralism*” (Messner and Rosenfeld, 2001, p. 156, emphasis in original). Under this configuration, societal members develop a strong sense of obligation to those with which they share social, ethnic, or religious identities. The “other” becomes the enemy and the victim of, what Messner and Rosenfeld term “crime equivalents,” acts that may

or may not be condemned by codified law--repressions of personal freedoms, hate crimes, violations of human rights, vigilantism, ethnic cleansing, and the like. This institutional arrangement and the resultant cultural condition “encourages crimes in defense of the moral order itself, albeit understood in narrow and highly particularistic terms” (p. 156).

Rosenfeld suggests this articulation of IAT may provide an explanation for terrorism:

Terrorism is also nourished under the dominance of the primordial institutions in a world in which contrasting institutional arrangements have been on the ascendance for two centuries...religious and ethnic solidarity, real and imagined, figures predominantly as a protest ideal against the rationalism and universalism of the modern world. (2004, p. 25)

The third possible configuration is that by which the institutional balance of power tips in favor of the state. Under this arrangement, the emphasis is on the “exercise of power” (Messner and Rosenfeld, 2004, p. 96). State-dominance may manifest in ways similar to those discussed earlier, namely devaluation of non-political institutions, accommodations to the state by other institutional bodies, and penetration of political or ideological norms into these entities. A historical archetype of this state-dominant society may be exemplified by the Soviet Union.

Under this state-dominant arrangement, government control is infused into otherwise “naturally” autonomous realms (Garland, 1997). During the totalitarian rule of Josef Stalin in the 1930’s, virtually every normative social institution was torn

asunder or subordinated to the needs of the state. The traditional family was devalued as a “bourgeois institution.” Any cohabitation could be considered a family, abortions were available on demand, and divorces were obtained simply by requesting one, sometimes by “simply as sending a postcard” (Hosking, 1992, p. 213). It was only when the low birth rate began to cause a significant reduction in military conscripts that media propaganda began to extol marriage as a duty to the state. Abortions were outlawed, and divorce made prohibitively expensive. The Russian Orthodox Church became the rival to the state’s “all-embracing ideology,” which had begun to take on the “claims and attributes of an established church” (p. 227). Religious repression led to underground secret services. Muslims in the Soviet Union were forced to accommodate (under threat of arrest) to the demands of the state, phasing out *sharia* courts and “voluntarily” converting mosques into schools, clubs, and cinemas (p. 239). Penetration of Soviet ideology was apparent in all realms of social life, especially in the schools. Soviet schools taught both political and technical curriculums in order to prepare future workers who were “above all *party* men” (p. 208, emphasis in original). Other historic and contemporary examples of state-dominance include: state control of the birth rate (China), economic statism (Italian fascism), single-party states (Ba’ath party of Syria), and nationalized education (Cuba), while other nation-states may also be thought to lie somewhere on an autocracy-democracy continuum.

Messner and Rosenfeld suggest that “as the state assumes an ever expanding role in regulating everyday life, the opportunities for the exercise of personal agency are diminished...a sense of direct responsibility for the well-being of others accordingly

atrophies” (2001, p. 155). Elements of social capital, such as altruism and empathy toward others, are reduced. This leads to cultural conditions characterized by “moral cynicism”; the resultant state is one of high levels of corruption and other self-serving crimes of power (Rosenfeld, 2004, p. 25).

What each of these institutional configurations lacks is the balance that the normative properties of institutions provide; each is “incomplete in an important sense. They fail to incorporate the moral codes associated with other institutions” (Messner and Rosenfeld, 2004, p. 156). The influence of strong families and educational institutions as a buffer against state dominance is intuitive; each provides an escape and a refuge from the repression of a dominant government. In addition, both provide a socialization function. These mechanisms are similar to the normative influences of these institutions in an economically dominated society, as described in the conventional reading of IAT. The possible *moralizing* effect of the third institution—the market, is less obvious and warrants further discussion.

Markets, Morality and Crime

The topic of markets and morality can be framed under two opposing viewpoints described by Hirschman (1992, cited in Rosenfeld and Messner, 1997). Under what Hirschman terms the *self-destruction thesis*, capitalist markets erode institutional controls “to the extent that they free persons from the restraints on self-interested behavior imposed by political, social or moral obligations and ties” (Rosenfeld and Messner, 1997, p. 209). This thesis, found in the extant tests of IAT where a dominant economy is seen as criminogenic, is theoretically informed by

Marxist and radical accounts of capitalism. Under this arrangement, traditional social relations “have been 'torn asunder' in the process of capitalist development” without the replacement of substitute values save for efficiency and profit (p. 209). In this economic system, individuals become egoistic. According to Bonger, this society is “based upon exchange [that] isolates the individuals by weakening the bond that unites them” (1969, p. 41). It is in this societal model where markets become disembedded from and dominate over other social institutions, and where “the pursuit of private gain becomes the organizing principle,” (Currie, 1991, p. 255) that is the basis for the conventional reading of IAT as an explanation of instrumental crime.

For the proposed study, however; it is necessary to consider, an opposing viewpoint, what Hirschman terms the *doux-commerce thesis*. Based upon liberal political and economic theory of the enlightenment, and found in the writings of David Hume and Adam Smith, under the *doux-commerce* principle the market functions as a “civilizing” force, replacing the barbarism of feudal society. Under this configuration:

market involvement promotes personal attributes such as thrift, industriousness, honesty, and reliability, behaviors that are required to sustain the central organizing principle of markets: reciprocity. (Rosenfeld and Messner, 1997, p. 208)

Historian E.P. Thompson (1963, cited in Karstedt and Farrall, 2006) similarly describes the “moral economy” of markets as “grounded in a morality of fairness, justice, roles and rules, and shared notions of acceptable behaviours [*sic.*], profits and entitlements” (p. 1014). Thus the *doux-commerce* thesis prescribes a “happy marriage”

between the individual and the collective: “[t]he image is one of sovereign and rational individualists with a strong self-interest in preserving mutually beneficial, cooperative, and trusting exchange relations with others”. In this capacity, the market may then be considered an institution of normative control, “pacify[ing] the irrational brutalities, moral cynicism, and withdrawal caused by dominance of the state and “enhanc[ing] the moral order of society” (Rosenfeld and Messner, 1997, p. 208-209).

Chapter Four

Data and Methods

Messner and Rosenfeld note, “the principal claim of institutional anomie theory is that institutional imbalance *per se*, and not simply dominance of the economy” (2001, p. 155, emphasis in original) is responsible for high crime rates. As previously discussed, “analytically distinct configurations that reflect differences in the institutional balance of power” predict different types of crime (Messner and Rosenfeld, 2004, p. 96; See Table 2, this thesis). Messner and Rosenfeld propose that, in societies where the state dominates the other institutions, high levels of corruption can be expected, leading to the first hypothesis:

H₁: The level of state dominance (defined herein as the absence of popular control over the state) is positively related to corruption cross-nationally.

In their initial partial test of IAT, Chamlin and Cochran (1995) posed that institutional anomie theory hypothesizes that a strong free market economy, *coupled* with the weakened ability of the non-economic social sector to fill a normative role, leads to an anomic state. According to Chamlin and Cochran “it appears that the *interplay* between economic and other social institutions determines the level of anomie within a collectively and, in turn, the level of crime” (p. 423, emphasis added). Thus, a conditional relationship is expected, such that:

H₂: The effects of non-polity institutions will *moderate* the criminogenic effects of

state dominance.

This moderation hypothesis has been supported in the literature (Hannon and DeFronzo, 1998; Messner and Rosenfeld, 1997; Piquero and Piquero, 1998; Savolainen, 2000, Schoepfer and Piquero, 2006; Stucky, 2003); however, in their sub-national test of IAT, Maume and Lee (2003) suggest another possible causal link—mediation. According to the researchers, “the characteristics of the economy in a social system not only shape the character of social institutions, but also...the economy will continue to have a *direct impact* on how other institutions function and are able to effectively control criminal behavior” (2003, p. 1148, emphasis added). Maume and Lee’s study supports this mediation hypothesis, which has also has garnered preliminary support at the cross-national level (Bjerregaard and Cochran, forthcoming, Trent, 2007). This leads to a third hypothesis:

H₃: The effects of non-polity institutions will *mediate* the criminogenic effects of state dominance.

Finally, although often omitted in empirical tests, Messner and Rosenfeld’s theory contains a cultural element in addition to its structural component. In the alternate, state-dominant configuration of IAT as tested in the current study, the dominant cultural ethos of the state-dominated society is not one of anomie, but rather one of moral cynicism (Rosenfeld, 2004). Under this arrangement, individuals eschew personal responsibility and are characterized by marked interpersonal distrust. At the aggregate level, this cultural orientation is conducive to high levels of corruption.

Therefore,

H₄: Nations whose cultural value systems exhibit high levels of moral cynicism will have higher levels of corruption.

Design Strategy and Research Purpose Revisited

The dominant strategy of both data collection and data analysis is quantitative toward the end of empirically testing hypotheses derived from an alternate configuration of institutional-anomie theory. Here the purpose is to confirm (or refute) this alternate configuration of Messner and Rosenfeld's IAT theory and examine the relationships between its theoretical constructs and corruption cross-nationally. Specifically, what is the relationship between state-dominance and corruption at the cross-national level of analysis? Do the effects of the economy, the family, and/or education attenuate that relationship, or do they interact? Is there a relationship between the cultural value system of a nation, measured as an aggregate response to an opinion survey, and the level of corruption in that nation?

Methodological considerations in cross-national research

Extant research in comparative criminology falls into three general methodological approaches: case studies, parallel studies, and multinational, "large-*n*" quantitative analyses (Howard et. al., 2000, Neapolitan, 1999). The first type of comparative research is an in-depth case study, generally macro-level, of one nation. While critics have claimed that this type of research is not comparative, a methodologically sound case study both increases the knowledge base of the discipline (Bennett, 1997; Howard et. al., 2000; Flyvberg, 2006) and provides a potential for future replication with positive, negative, and/or non-conforming cases (Brady and Collier,

2004). A majority of published criminological research on corruption falls into this single-nation category (e.g. Brovkin, 2003; Green, 2005; Lu and Gunnison, 2003; Markovskaya, Pridemore, and Nakajima, 2003; Rodgers, 2006).

Parallel studies such as topical comparison (e.g. Neapolitan, 1994; 1999) provide an opportunity to compare and contrast crime rates and/or criminal justice systems across nations. As pointed out by Howard et. al. (2000), this methodology allows for comparisons that are more meaningful, overcoming many of the difficulties resulting from the lack of comprehensive macro-social data. The researcher is able to account for and better explain differences in police reporting, local historical and cultural differences, and political and economic structures, although generalizability of results diminishes. Criminologists have used this methodology to examine corruption victimization in Latin America (Seligson, 2006), corruption in post-communist countries (Karklins, 2002; 2005; Karstedt, 2003; Sajó, 2003), and civil versus common law responses to corruption (De Sousa, 2002).

Multinational quantitative methods use the nation as the unit of analysis, examining theoretically derived correlates of crime such as income inequality, social disorganization measures, or modernization, usually through multivariate regression analysis. The advantage of this method is its ability to test hypotheses, as well as to identify patterns and trends across different societies (Howard, et. al, 2000; Neapolitan, 1999). A majority of studies use homicide rates as the dependent variable, and with good reason; compared to other offenses, the availability and relative validity and reliability of the data is greatest for homicide (e.g. Chamlin and Cochran, 2005; Gartner,

1990; LaFree, 1999; LaFree and Drass, 2002; Messner, 1982; Messner and Rosenfeld, 2007; Neapolitan, 1994, 1999; Pampel and Gartner, 1995; Savolainen, 2000). Others have looked at other violent and/or property crimes (e.g. Fajnzylber, Lederman and Loayza, 2002; Krohn, 1978; Krohn, and Wellford, 1977; Jensen, 2002; Messner and Rosenfeld, 2007; Neapolitan, 2003; Stack, 1984). While growing in the political science, public administration, and economic disciplines, “large-n” comparative studies of corruption cross-nationally are limited in the criminological literature (for exceptions see Sung, 2004; Xin and Rudel, 2004), or restricted to descriptive analyses.

As the purpose of the proposed study is to test hypotheses at the cross-national level, variable-based, “large-*n*” regression analysis is the most appropriate research strategy. This method is not without limitations. The operationalization of highly abstract theoretical constructs reduces these social processes simply to a collection of variables to be “accounted for”, rather than nations as “meaningful wholes” (Goldthorpe, 1997, p. 2). This simplification tends to ignore the causal processes and the historical, cultural, social, and economic antecedents and trends that contribute to a nation’s aggregate rates of corruption. This drawback is noted; however, as this study is exploratory in nature, multivariate analysis retaining the largest number of cases is most suitable to the task of evaluating theory.

Sample

The appropriate level of analysis for the proposed study is that of the nation-state. The universe is all legally sovereign and independent nation-states. For quantitative analysis, ideally, a random sample would be drawn from the population of

approximately 193³ entities recognized by international bodies; however, practical concerns influence the sample used in the final analysis.

Perhaps the bane of cross-national and macro-social research remains the limited availability of reliable comparative data across theoretical constructs (Bennett, 1980; Bennett and Lynch, 1990; Boyle, 2000; Howard et. al., 2000; Karstedt, 2001; Krohn, 1978; Krohn and Wellford, 1997; Marenin, 1997; Neapolitan, 1997, 1999, 2003). The researcher often cannot efficiently and feasibly collect all of the desired data due to cost, language barriers, and difficulty and resistance from the national stakeholders. Additionally, these data are rarely compiled systematically within respective nation-states. This necessitates the use of secondary data. Following Bennett and Lynch (1997), the sample for the quantitative analysis in the proposed study will be limited to nations available in existing data sets with complete data across all key variables.

Extant empirical assessments of institutional-anomie theory, where the level of analysis is the nation-state, have used samples ranging from 33 to 84. Cases were included because either they had complete data across all variables or imputation methods were utilized to maximize the amount of nations available for analysis (Chamlin and Cochran, 2006, 2007; Jensen, 2002; Messner and Rosenfeld, 1997; Pratt and Godsey, 2003; Savolainen, 2000). In the present study, data are obtained primarily

³ Based in part upon the list of countries and territories assigned a three-digit International Standard ISO 3166-1 Code for the representation of names of countries and their subdivisions as used by the Statistics Division of the United Nations (see <http://unstats.un.org/unsd/methods/m49/m49alpha.htm>), nations recognized by the United States Department of State (see <http://www.state.gov/s/inr/rls/4250.htm>), and *The World Factbook* (see <https://www.cia.gov/library/publications/the-world-factbook/index.html>).

from the Shared Global Indicators Cross-National Database (Norris, 2008), which compiles data on over 700 indicators from several published sources for 191 nations. Full variable descriptions and sources of data appear in Appendix A. Due to missing values, the current study includes a maximum of 125 nations.

Dependent variable

In the study of crimes of the powerful, there are innate practical limitations in the choice of definitions that can be applied and the data that can be used. The hidden nature of corruption makes this crime inherently difficult to study (Karklins, 2002, Xin and Rudel, 2004; Zimring and Johnson, 2005). Initially, the United Nations Surveys on Crime Trends and the Operations of Criminal Justice Systems officially recorded cross-national corruption and bribery rates appeared promising⁴ (Burnham, 1998)

Ten waves of annual data have been collected by the United Nations Crime and Justice Information Network (UNCJIN) since 1975. Data for these surveys are collected via voluntary surveys sent to both member and non-member nation-states. Each survey year contains official recorded instances of crime disaggregated by offense. Relevant to the current study, this dataset includes bribery rates, defined as:

Bribery and/or corruption may be understood to mean requesting and/or accepting material or personal benefits, or the promise thereof, in connection with the performance of a public function for an action that may or may not be a violation of law and/or promising as well as giving material or personal benefits

⁴ In a white paper published by the U.S. Department of Justice, Barnett (2002) states that bribery is the most reported and cleared white-collar offense using NIBRS; at the cross-national level, however; this indicator appears quite unreliable for comparative analysis.

to a public officer in exchange for a requested favor. (United Nations, n.d., p. 5-6)

Following Bennett and Lynch (1990), it is instructive to note that, while the use of official crime rates may be deceptive in evaluating the *exact* amount of crime in any given nation, it has been found reliable in determining and comparing *trends* across social collectives. We should be able, then, to assess the efficacy of institutional-anomie theory cross-nationally by analyzing these trends and their relationship to a bribery rates and to draw reasonable conclusions.

Preliminary analyses using the United Nations dataset proved both instructive and disappointing. The sixth (1995-1997) and seventh waves (1998-2000) of the United Nations Survey were used; to control for annual fluctuations, the average bribery rate was computed from the annual recorded data. Only twenty-nine of the ninety-two total respondent nations had complete data across all IAT indicators, an attrition rate of almost 68%. As crime rates are rare events and the dependent variable was overdispersed, effects were estimated using Poisson-based negative binomial regression analysis (Osgood, 2000). When regressed on the cultural and institutional variables identified by institutional-anomie theory (to be discussed shortly), the direct effects model as a whole was not significant ($\chi^2 (df) = 9.43(5), p > 0.05$). Individual coefficients and incidence-rates ratios (IRR) are shown in Table 3.

Table 3: Negative binomial regression estimates for bribery rates, cross-national data (N = 29), 1995-2000

Variable	Coef.	S.E.	I.R.R.	S.E.
State dominance	-.34	.37	.71	.27
Industrialization	-1.04	.61	.35	.21
Family disruption	.04	.04	1.0	.04
Education	.35	.42	1.4	.60
Moral cynicism	.90	.39*	.41	.15*
Pseudo R-square	.069			
Log-likelihood	-63.44			
χ^2 (df)	9.43(5)			

* p < 0.05

Only one predictor reaches statistical significance in this model. The cultural condition of moral cynicism is positively related to bribery rates, as suggested by theory. This should be approached with caution; since the model itself is not significant, this relationship is likely significant purely by chance (McClendon, 2002, p. 172).

The reliability and validity of cross-national crime statistics is often suspect (Vigderhous, 1978). This is due to problems at the level of data collection, rather than methodological concerns (Bennett and Lynch, 1990; Reichel, 1999). Based upon this preliminary analysis, United Nations data are inappropriate for the present study, as the measure of official bribery rates cross-nationally provides little confidence in the results—they simply do not allow the researcher to adequately answer the research questions and test the alternative configuration of IAT. Furthermore, it is unclear if we are measuring incidences of corrupt acts, the quality of law enforcement, courts and prosecutors, and/or anti-corruption policies.

Similar to the “dark figure of crime,” there exists a “dark figure of corruption,” whereby many acts of official malfeasance go unreported and undiscovered. Only some crimes are reported to the police who, in turn, may only record a portion of incidents.

Furthermore, when looking at the offense of bribery, the police themselves are often the offender. At the level of grand or systemic corruption, a single, identifiable victim may not even exist. Errors may be aggravated by (1) definitional discrepancies, or the legal definition of bribery in differing jurisdictions (Huang and Wellford, 1989); (2) differing levels of reporting crime to the police or different traditions of policing. For example, in nations where the state is dominant, residents may have little or no confidence in the authorities and/or fear retribution by the very nature of the offense (for example, bribery) being studied (Marenin, 1997; Rosenfeld, 2004). Unfortunately, these nations are the most interesting cases. Finally, (3) different socio-economic and political contexts could lead to different levels of reporting and recording (i.e., poorer nations may not have the available resources to adequately and systematically collect valid and reliable data). As noted by Jacobs (2002), “it is hard to think of any other crime that so lacks an indicator of prevalence” (p. 88).

An alternate to official incidence rates exists for offenses of corruption and bribery—corruption perceptions indices. Both the World Bank Group (Kaufmann, Kraay, and Mastruzzi, 2003) and Transparency International (TI) provide indicators of corruption perceptions cross-nationally based upon multi-source surveys of international organizations, think tanks, citizens, non-governmental organizations (NGOs), and business risk analysts from both within and outside individual nation-states. Using similar methodologies, these “polls of polls” measure the perceptions of the overall climate of corruption in a given nation as perceived by those stakeholders who “have strong incentives to gauge corruption as accurately as possible” (Montinola and

Jackman, 2002, p. 156). Both the World Bank Worldwide Governance Indicator (WGI) Control of Corruption measure and Transparency International Corruption Perceptions Index (TI-CPI) are considered valid and reliable indicators of a nation-state's level of corruption, measured as perceived levels (Kaufmann, Kraay and Mastruzzi, 2007; Sandholtz and Koetzle, 2000; Treisman, 2000; Xin and Rudel, 2004). As the level of corruption varies widely not only across, but within nations, it has been suggested that measuring the true magnitude of corruption, especially in large, diverse countries "probably cannot exist in principle" (Rose-Ackerman, 1997, p. 31). Furthermore, as suggested by Meny (1996), due to the clandestine nature of corruption, frequency estimates measuring the prevalence of corrupt practices are as much "a matter of *perception and feeling*" as the "mathematical measurement of the phenomenon" (p. 310, emphasis added). Thus, the use of corruption perception measures, such as those published by the World Bank and Transparency International, are likely the best measure to gauge the level of corruption in a nation for large-*n*, comparative, cross-national hypothesis testing.

Although the World Bank Corruption Control measure and Transparency International Corruption Perceptions Index are compiled from different sources, the two are highly correlated ($r = .98$) and thus the latter is chosen for the current study based upon the nations ($N = 180$ maximum) and years recorded. Transparency International is a non-partisan, global civil society organization geared toward measuring corruption cross-nationally and propagating the anti-corruption movement. The organization's Corruption Perceptions Index (TI-CPI) is a composite index of survey data, the first

systematic attempt to measure corruption cross-nationally using the same metric for each nation. The most recent CPI (Lambsdorff, 2007) includes 14 sources, originating from 12 independent institutions, and covers 180 nations. For a country to be included, it must feature at least three polls. Poll inclusion is contingent upon the following: (1) the source must include a ranking of nations for comparative purposes, and (2) the poll must not include other issues such as political instability or decentralization. Overall correlation between the respective sources is, on average, 0.77 indicating that the individual assessments do not differ substantively (for full methodology of the CPI, please consult Lambsdorff, 1998; 2007).

Transparency International has been criticized on its methodology for its use of a bootstrapping approach when the number of sources for a nation is small, which can result in spuriously small amounts of variance and exaggerated estimates (Kaufmann, Kraay, and Mastruzzi, 2003). Sajó has been critical of indices measuring corruption “perceptions” in general, claiming that these instruments “gain [their] own dynamic” (Sajó, 2003, p. 177), measuring not “real corruption”, but rather corruption as “imagined” by the general public, who are, in turn, informed by pollsters (p. 176). Additionally, Sajó argues that perception indices label a whole society, creating the “image of a massive, homogenous wrongdoing” in a way that is at the same time “overinclusive and underinclusive” (p. 177).

Criticisms notwithstanding, the TI-CPI has been used in prior studies when the purpose is comparative research (Goldsmith, 1999; Karstedt, 2003; 2007; Sung, 2004; Treisman, 2000; Xin and Rudel, 2004), and, based upon the current study’s research

purpose, it remains the most appropriate index. The TI-CPI provides a large number of observations from nations at varying stages of development across several years, necessary for testing the hypotheses at hand. For the present study, the dependent variable represents a nation's TI-CPI score, reverse-coded so that higher scores indicate "cleaner" nations. To control for annual fluctuations and the possibility of high-profile scandals skewing results, annual scores are averaged for the years 2000-2005.

Independent variables

Among the greatest challenges to empirical tests of institutional-anomie theory, is the difficulty in operationalizing its highly abstract theoretical claims (Messner, 2003; Messner and Rosenfeld, 2004; 2006). As IAT is cast at a high level of abstraction, the use of proxy measures is necessary; "IAT employs concepts...amenable to alternative interpretations. Such concepts can be rich in meaning, but they defy easy operationalization" (Messner, 2003, p. 15). Moreover, prior research has suggested that IAT is sensitive to the operationalization of its key variables (Piquero and Piquero, 1998). This challenge is magnified in cross-national research, when an "operational calculus [must be employed] to ensure that the variables reflect the same concepts in [different] cultures" (Bennett, 1980). The current study uses conventional indirect proxies gleaned from existing tests of IAT and cross-national corruption studies (when possible).

Defining and operationalizing "moral cynicism"

In the economic-dominant/anomic configuration of IAT, Messner and Rosenfeld (2007) draw from Merton's (1938; 1968) perception that the anomic state is created in societies where, within the culture of the collective, there is malintegration between the

emphasis on the pursuit of goals and the available normative means to achieve these goals:

“On the one hand, they are asked to orient their conduct toward the prospect of accumulating wealth and on the other, they are largely denied effective opportunities to do so institutionally” (1938, p. 679). This “cultural ethos” manifests in a “distinctive set of value commitments”—an achievement orientation, individualism, universalism, and a “fetishism of money” (Messner, 2003, p. 6-7). Operationalizing and quantifying this cultural ethos has proven most difficult, and, as a result, it is often omitted from the bulk of tests of institutional-anomie theory. Several researchers have, however, used social surveys such as the World Values Survey to capture this crucial facet of IAT’s theoretical framework (See Cao, 2004; Chamlin and Cochran, 2007; Cullen, Parboteeah, and Hoegl, 2004; Jensen, 2002).

In the present test of the state-dominant configuration of IAT, the dominant cultural ethos is not a malintegration between goals and means, but rather between state regulation at the structural level and personal agency and direct responsibility in the citizenry. Rather than a manifestation of anomie, in the current study the researcher must operationalize and quantify *moral cynicism* at the aggregate level. First this concept must be defined.

Based upon differing dominant institutions and resultant cultural conditions, Messner and Rosenfeld suggest that the varying forms of institutional imbalance are possible; each believed to produce diverse offense types (2001; 2004; Rosenfeld, 2004; Refer to Table 2, this thesis). The authors, however, do not provide any guidance on the

conceptualization or operationalization of IAT's key constructs, including what they term "moral cynicism."

Referring back to the theoretical roots of anomie, Durkheim claims that moral feelings toward others are strongest in social groups when individual members are bound by attachment and commitment to, and involvement in the group (1961). In his review of Durkheim's sociology of morality, Hearn states that, for autonomous individuals in modern societies, commitments to "the collective ideal" and group membership "shield[s] them from anomic forces and the state's tendency toward totalizing control" (1997, p. 82). He goes on to say that "communitarian interdependencies... feed the trust, responsibility, and sense of morality on which rest responsible neighborhoods" (p. 33). If strong feelings of mutual responsibility, interpersonal trust, and social group membership are the hallmark of well-functioning societies, then, as Hearn notes, malfunctioning societies are those marked by distrust, where informal social controls are replaced by "formal, impersonal, and repressive modes of regulation supplied by the state, police, and courts" (p. 34).

In his ecological theory of deviant places, Rodney Stark proposes that densely populated neighborhoods will display high levels of "moral cynicism", which he defines as "the belief that people are much worse than they pretend to be...serv[ing] as inferior role models for one another" (1987, p. 896). This leads to low levels of interpersonal trust amongst members of the collective. According to Braithwaite, effective social control relies on communitarian interdependencies. Once these bonds between members of the collective are severed, "moralizing social control collapses, [and] a

vacuum is created that will attract the most brutal, repressive, and intrusive of police states” (1989, p. 186).

The writings of Durkheim, Hearn, and Braithwaite suggest that the direction of causality is from moral cynicism to a repressive polity, while Jacobs (2002) notes that political corruption leads to a “dispirited and alienated citizenry” (p. 83). In their discussion of the alternative configurations of IAT, Messner and Rosenfeld speculate that, in state-dominant societies, societal members are characterized by their “moral cynicism,” “withdrawal,” and by a “lack of personal agency” or responsibility in the citizenry, suggesting a concomitant relationship between moral cynicism and state repression (Rosenfeld, 2004, p. 25). While the direction of causality and possible feedback loops cannot be estimated in the current cross-sectional study, from these speculated relationships, an operational definition of moral cynicism can be formed. For this study, the dominant cultural orientation of moral cynicism is understood as an aggregate of atomized, distrustful individuals, withdrawn from the collective—anti-communitarian, and anti-altruistic, and devoid of personal civic responsibility.

In the tradition of prior research that has attempted to operationalize and measure culture at the aggregate level (Cao, 2004; Chamlin and Cochran, 2007; Cullen, Parboteeah, and Hoegl, 2004; Jensen, 2002), the current study uses the World Values Survey, an instrument that endeavors to capture individual sociological, cultural, and political values and opinions cross-nationally. The World Values Survey (originally the European Values Study, cited as such), has been conducted in four waves since 1981 and consists of about 250 questions yielding more than 800 variables that capture individual

sociological, cultural, and political values of residents of a maximum of 90 nations. An average of 1300 face-to-face interviews is conducted in each country by a network of social scientists (full methodology is available at www.worldvaluessurvey.org). For the present study the 2000 World Values Survey is used; aggregated responses (see Liska, 1990) on three items represent measures of “cynical orientation” and interpersonal distrust (Messner and Rosenfeld, 2001, p. 155).

The first indicator is the total number of *voluntary organizations* (including church or religious, sport or recreational, art, music or educational, environmental organization, professional association, and/or charitable organization) in which individuals report membership. The mean value was calculated for each nation and signified that nation’s overall level of commitment and involvement in communitarian and voluntary endeavors. The second measure captures the aggregate level of citizen’s views on *personal responsibility and agency* based upon the aggregated mean response to the following:

- “How would you place your views on this scale? One suggests that “the government should take more responsibility to ensure that everyone is provided for” and ten means that “people should take more responsibility to provide for themselves”.

Additionally, Stark posits that high levels of moral cynicism will be accompanied by correspondingly high levels of *interpersonal distrust*. Rooted in social capital theory (Putnam, 2000), interpersonal distrust has been linked to corruption in a sample of Latin American (Morris, 2004) and post-Soviet nation-states (Fish, 2003). For the current

study, the lack of social trust is captured by the response to the following question, aggregated to the mean level for each country:

- “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people? (One to five scale where higher values indicate distrust) (European Values Study Group, 2004).

In order to preserve degrees of freedom, factor analysis is used in order to reduce these three measures into a single variable using principal components analyses (PCA). The voluntary organization and personal responsibility and agency variables load on the same dimension (factor loading = 0.858; Eigenvalue = 1.47), and explain 73.7% percent of the variance. This measure also exhibits a high degree of internal consistency ($\alpha = 0.83$). This measure is reverse-coded (*(-1)) so that *higher* values indicate higher levels of *moral cynicism*. The measure of interpersonal distrust does not appear to tap into the same latent construct as the previous two measures and will be entered into the regression analysis separately.

State Dominance

While *Crime and the American Dream* focused on an institutional arrangement dominated by the economy, Messner and Rosenfeld also envision another possible configuration; a “tip” in the institutional balance of power where the state is dominant. This arrangement leads to “high levels of corruption and related forms of manipulation of personal relationships for unfair advantage” (Rosenfeld, 2004, p. 96). For the current study, in order to conceptualize state dominance, an appropriate definition of its antithesis is first supplied. This study uses Robert Dahl’s concept of *polyarchy* or

pluralism (rather than democracy, which Dahl regards as an unachievable ideal).

According to Dahl, a polyarchy consists of

[C]ontrol over government decisions about policy is constitutionally vested in elected officials; (2) elected officials are chosen in frequently and fairly conducted elections in which coercion is comparatively uncommon; (3) practically all adults have the right to vote...(4) practically all adults have the right to run for elective offices...(5) citizens have the right to express themselves without the danger of severe punishment on political matters broadly defined; (6) citizens have the right to seek out alternative sources of information. Moreover, alternative sources of information exist and are protected by law; and (7) citizens...have the right to form relatively independent associations or organizations, including independent political parties and interest groups (1982, p. 11).

State dominance is thus operationalized by first constructing a multi-dimensional, multi-source polyarchy scale and then reversing to a one-to-five scale of state dominance. This variable then is essentially the *lack* of “popular control over the state” (Fish, 2005, p. 21).

As the concept of polyarchy is multi-dimensional; multiple measures are used to tap into this complex construct. The first set of variables is from the Governance Indicators Index published by the World Bank Group (Kaufmann, Kraay, and Mastruzzi, 2003; 2007). This perception-based, or subjective, set of aggregate indicators has been collected annually since its inception in 1996; the latest survey in 2007 is based upon

311 variables from 33 different sources and covers 212 nations. Survey respondents include NGOs and commercial risk analysts, multilateral development agencies, and internal and external observers. The survey employs an Unobserved Component Model (UCM) to aggregate responses into six dimensions: voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption (Kaufmann et. al., 2007).

The current study utilizes three disaggregated measures of “good governance” that agree with Dahl’s concept of polyarchy: *voice and accountability*, *regulatory quality*, and *rule of law*. The first captures the extent to which citizens are able to select their leaders and participate in the political process. This measure falls in line basic tenets of public choice/principal-agent theory, such that, in closed polities, principals lack the ability to monitor the agents, providing an opportunity structure conducive to corrupt practices (Jain, 1998; Rose-Ackerman, 1978).

Regulatory quality, although not specified by Dahl, indicates “the incidence of market-unfriendly policies such as price controls.” Low levels of regulatory quality are indicative of policies of economic statism—or state interference in the free market. Montinola and Jackman have stated that market competition is a “necessary condition for honest government” (2002; p. 151), and economists have suggested that corruption disrupts the competitive nature of the market, distorting “what should be at arms’ length or objective and unbiased, relationships between government officials and private sector individuals” (Tanzi, 1998, p. 111. See also Ades and DiTella, 1997; 2000; Gerring and Thacker, 2005; Sandholtz and Koetzle, 2000).

Rule of law captures the “lawyer’s approach” to the study of corruption, or the extent to which “agents have confidence in and abide by the rules of society”, including the “effectiveness and predictability of the judiciary” (Kaufmann, 1998, p. 143). This “indicator measures a society’s success in developing an environment in which fair and predictable rules form the basis for economic and social interactions” (Kaufmann et. al, 2003, p. 4). Multi-year averages spanning five years of annual data (2000-2005) on each governance indicator are used in the current study.

Two measures published by Freedom House (2004) are employed in the current study. The Freedom House Civil Liberties and Political Rights Index is comprised of a 1-to-7 scale (free to not free) and is based upon the United Nations 1948 Universal Declaration of Human Rights. The social activist school of thought suggests that the absence of civil liberties, such as freedom of expression, associational and organizational rights, and personal autonomy, greatly increases political corruption (Kaufmann, 1998). The Freedom of the Press index is a 1- to-100 scale that rates nations based upon the legal environment for reporting and political pressures on journalists. Both indices are based upon in-depth nation summaries compiled by a team of regional experts and scholars; historical background and current events are also included in the overview of the country. One hundred and ninety-two nation-states and 14 territories are included in the final index. In the current study, both indices are reverse-coded for interpretability, so that higher scores equal *greater* freedom.

Finally, two additional composite indices of democracy are used. The Vanhanen Index (VI) covers the period 1810 through 1998. The VI is an objective index that

combines two basic dimensions of democracy—competition (% seats occupied by dominant party) and participation (electoral turnout) (2000). These measures are aggregated using the following formula:

$$C(\text{ompetition}) * P(\text{articipation}) / 100$$

The Vanhanen Index has also been called “the polyarchy dataset” due to its proximity to Dahl’s concept of polyarchy. Competitive government reduces corruption since party turnover minimizes opportunities, while a larger “selectorate” yields greater transparency amongst the politicians (Montinola and Jackman, 2002, p. 153-154).

The Cheibub standardized scale is based upon Cheibub and Gandhi’s six-fold classification of regime type (monarchic dictatorship, military dictatorship, civilian dictatorship, presidential democracy, mixed democracy, parliamentary democracy). This scale covers the years 1946-2002; higher scores designate greater popular rule (2004). Rose-Ackerman (2001) has found that corruption is correlated with the constitutional structure of a given country, ranking parliamentary systems as best at the avoidance of corruption and party-centered presidential (presidential democracy) as worst. Nations under dictatorships are often predatory kleptocracies, where economies become wealth-building mechanisms for those in power, at the expense of the populace (Jain, 1998).

In order to preserve degrees of freedom, the polity measures described above are factored into a single polyarchy variable using principal components analysis (PCA). The resultant values are then multiplied by (-1) in order to remove negative scores for interpretability and, finally, one-to-five scale is created. This scale indicates the level of

state dominance, or the lack of popular rule, in a given nation-state. Factor loadings, Eigenvalues, and percentage of variance explained are shown in Table 4.

Table 4: Principal components analysis for eight dimensions of polyarchy

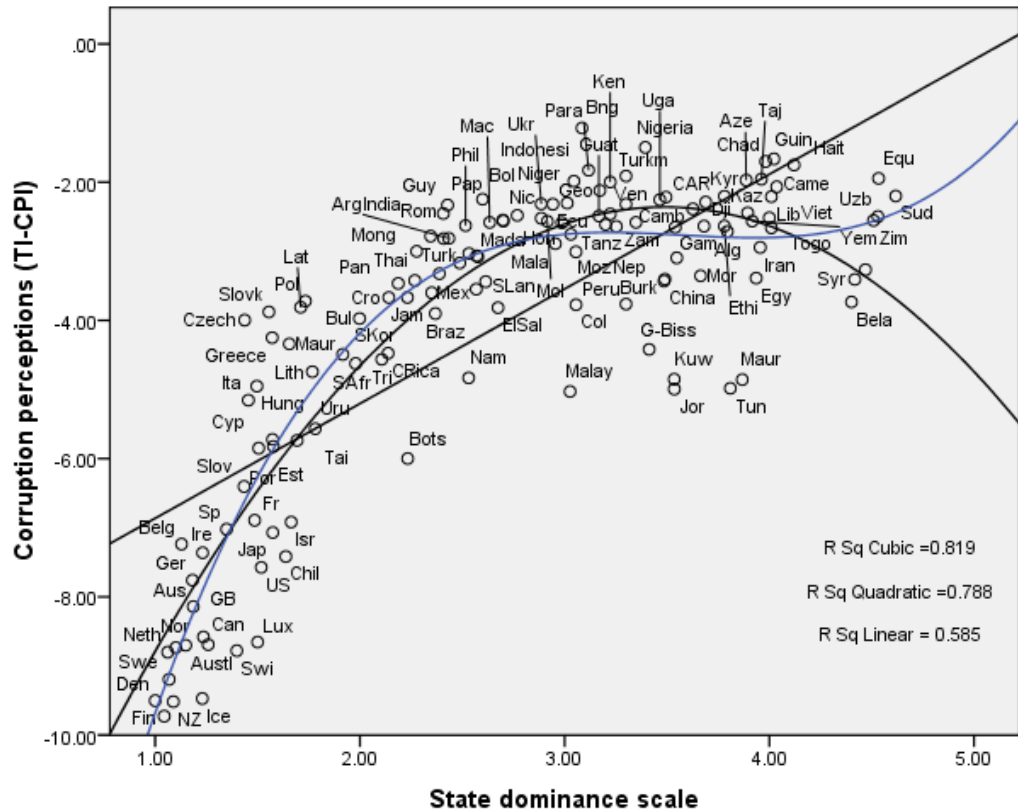
Variable	Factor loadings	Eigenvalues	% of variance
Voice and accountability	.982	7.19	79.87
Regulatory quality	.894		
Rule of law	.846		
Political rights	.931		
Civil liberties	.950		
Freedom of the press	.930		
Vanhanen Index	.648		
Regime type (Cheibub)	.781		

$\alpha = 0.70$

Extant research has suggested that the democracy-corruption relationship is U- (quadratic) or S- (cubic) shaped (Montinola and Jackman, 2002; Sung, 2004). As the current study's measure of state dominance is, in essence, the inverse of polyarchy (or democracy), it is instructive to assess the functional form that the state dominance-corruption relationship takes in the current data.

TI-CPI scores were plotted against the state dominance scale, and the resultant distribution followed an s-shaped, or cubic, pattern as evidenced by the blue fit line ($R^2 = 0.819$) in Figure 2 (below).

Figure 2: State dominance-corruption functional form



While hierarchal polynomial regression is the preferred method of estimating the parameters for nonlinear $y-x$ relationships, the transformation of the non-linear x to higher-order polynomials results in regression coefficients that become difficult to interpret (Fox, 1991). In the current study, these interpretability issues would be compounded, since the key independent variable, state dominance, is a factor score derived from six components, each of which capture a dimension of polyarchy. Finally, as the moderation hypothesis of the current study suggests a non-additive relationship, the use of higher-order polynomials would further muddle any clear substantive interpretation of the regression parameters. As the research purpose of the current study is not to assess the functional form of the state dominance-corruption

relationship, but rather to test hypotheses derived from an alternate configuration of a criminological theory, an alternate strategy is warranted.

Another method of “straightening out” non-linear associations is the use of power transformations of x that allow the model to be “fit” using ordinary-least-squares regression. The shape and direction of the curvature produced by the non-linear x - y relationship determines which direction one moves on the power ladder (see Tukey, 1977). Based upon Figure 2 (above), the first segment of the S-curve is a concave U-shape, as state dominance and corruption both initially increase. Next, the curve appears to somewhat level out, before again increasing. As the overall curve appears monotonic, the power transformation for the concave U-shape is either the natural log ($\ln x$) or the negative inverse of x ($-1/x$) (Fox, 1991). As shown below (Figure 3), the negative inverse ($-1/x$) transformation yields the closest approximation to linearity (again, indicated by the blue fit line), with the R-squared value of the linear equation increasing from 58% to 79%. Figure 4 shows the log transformation of x , which only increases the linear fit to approximately 71%.

Figure 3: State dominance-corruption, reverse inverse transformation

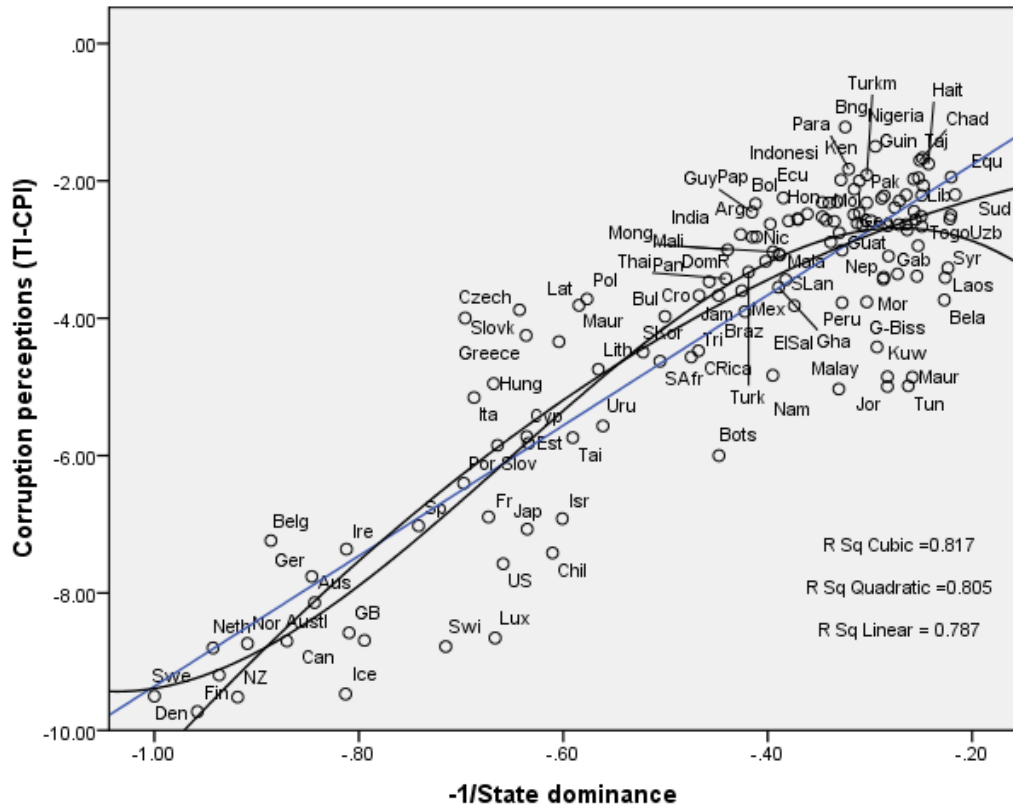
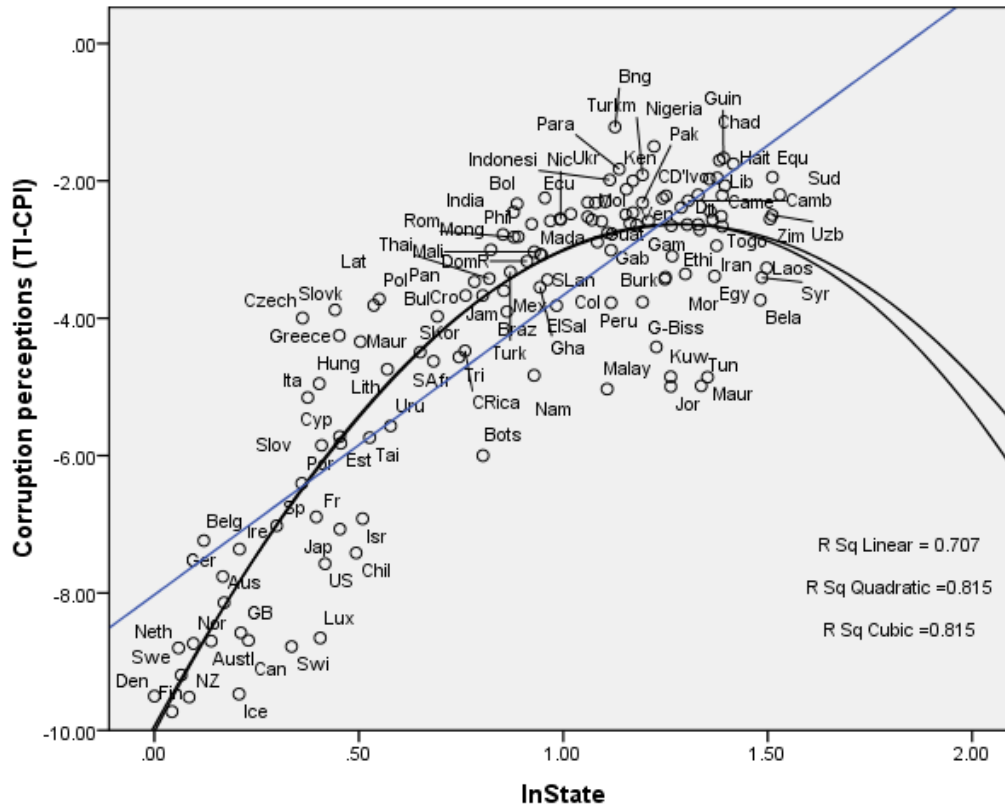


Figure 4: State dominance-corruption, log transformed



Economy

The role of the economy is to provide for basic human subsistence necessary for humans to adapt to their environment (for example, food, clothing, shelter). A standard strategy in tests of IAT has been to operationalize and measure the strength of the economy based upon an indicator of absolute (Chamlin and Cochran, 1995; Piquero and Piquero, 1998) or relative deprivation (Maume and Lee, 2003; Messner and Rosenfeld, 1997; Pratt and Godsey, 2003; Savolainen, 2000), or unemployment rates (Schoepfer and Piquero, 2006). The preferred method uses relative deprivation, typically the Gini coefficient, as this indicator includes reference groups (Passas, 1997), although recent research by Pridemore (2008) suggests that the deprivation-crime relationship becomes

null when a proxy for poverty (infant mortality) is entered into the equation. This finding suggests that reference groups may not be as influential as previously believed.

For the study of corruption, the use of inequality as an indicator of the economy is problematic. One of the most damaging consequences of corruption is the accumulation of wealth to the (already) privileged at the expense of the poor. Gupta, Davoodi, and Alonso-Terme (1998) found that, across 37 nations, corruption and the Gini coefficient were positively related, net the effects of other exogenous variables. Additionally, this impact remains significant when controlling for GDP. Other research has questioned the direction of causality of this relationship, suggesting that inequality and poverty is likely both a cause and a consequence of corrupt governments (Husted, 1999; Lambsdorff, 1999). The cross-sectional nature of the current study precludes testing this last hypothesis.

Consequently, the proposed study marks a departure from the bulk of prior research by conceptualizing the strength of the economy by the level of industrial development within a nation. Empirical studies suggest that industrialization is a valid indicator of the dominant economic system within a country (Bonger, 1969; Cullen, Parboteeah, and Hoegl, 2004; Esping-Anderson, 1990; Krohn, 1978), and prior research has linked industrialization, measured as government subsidies to manufacturing as a percentage of the Gross Domestic Product (GDP), to reduced levels of corruption (Ades and DiTella, 1997).

In the current study, industrialization is operationalized via the following proxy variables: commercial energy use (oil equivalent) per capita (kilograms) 1980-2002,

electric consumption per capita (kilowatt-hours) 1980-2001, and the average percentage of population living in urban areas (1990-1998). Commercial energy use measures levels of resources used in the industrial production of goods, as does electric consumption per capita. Urban population is a consequence of industrialization, as citizens flock to city centers for work, citizens who also contribute to an increase the consumption of electricity. Additionally, a nation's overall wealth is captured by its Gross Domestic Product (GDP) (ppp), averaged for the years covered by the current study (2000-2005). Research has shown that poorer countries are, in general, more corrupt than wealthier counties (Andvig et. al, 2000; Mauro, 1995), as they lack the resources to effectively fight corruption. Finally, the economic distribution by sector (percent non-agrarian) measures the distribution of the domestic product and labor force involved in both the industrial and service sectors. PCA results are shown in Table 5.

Table 5: Principal components analysis for five dimensions of industrialization

Variable	Factor loadings	Eigenvalues	% of variance
% of GDP non-agriculture	.769	2.79	69.84
Commercial energy use	.864		
Elec. consumption	.838		
Urban population (%)	.868		
GDP (ppp)	.789		

$\alpha = 0.65$

Family

Functioning similar to the conventional social bond in micro-level control theory

(Hirschi, 1969), the family “provide[s] for the literal reproduction of the population over time, and for the socialization, nurturance, and care of societal members” (Messner, 2003, p. 5). Additionally, the family provides a buffer from the stresses of the other institutional domains (Messner and Rosenfeld, 2007).

Empirical tests of IAT have operationalized this concept as *family disruption* using divorce rates (Batton and Jensen, 2002; Chamlin and Cochran, 1995; Jensen, 2002; Maume and Lee, 2003; Schoepfer and Piquero, 2006), or the percentage of single parent families (Kim and Pridemore, 2005; Piquero and Piquero, 1998). Divorce rates at the cross-national level are limited to a small number of nations making this variable unviable for the current study. Instead, a measure of female economic activity was used to measure family disruption. The current study employs a measure from the United Nations Human Development Report (2003) that reports the percentage of women over the age of fifteen who work outside the home. Admittedly, when compared to divorce and single parenthood, female employment is certainly not as disruptive to the traditional nuclear family, yet it may suggest that children are, at least for a period of time during the day, left alone in the home or under the supervision of older family members or non-familial child care workers.

Education

The role of education, similar to the family, is socialization, “but it also facilitates the creation and transmission of knowledge” (Messner, 2003, p. 5). In the literature, education has been operationalized as enrolled in college full time (Kim and Pridemore, 2005; Piquero and Piquero, 1998), comparative teacher salaries (Piquero and Piquero,

1998), percentage of high school dropouts (Piquero and Piquero, 1998; Schoepfer and Piquero, 2006), and/or school expenditures (Maume and Lee, 2003). One study by Mauro (1997) found a significant negative relationship between public education expenditures and corruption. The proposed study follows this convention using a factor variable comprised of the combined gross enrollment ratio for primary, secondary, and tertiary schools (2004), and the mean adult literacy rate (age 15 and above, 2000-2002). Both measures load on a single factor (factor loading = 0.819; Eigenvalue = 1.34), explaining 67.1% of the variance. Internal consistency is less than desired ($\alpha = 0.5$) as this measure is only constructed from two components.

Control variables

Known correlates of corruption are included in the regression analysis to control for possible spurious relationships. First, a *population heterogeneity* factor variable is created, comprised of ethnic fractionalization (Alesina et. el., 2002), and the Gini coefficient (United Nations, 2004). Studies suggest that ethnic divisions impact the quality of institutions; indeed, ethnic conflict has been associated with poor economic performance and policy and political instability, as well as higher levels of corruption within nations (Alesina et. al, 2002, Mauro, 1995, Morris, 2004; Treisman, 2000). The fractionalization variable is computed as one minus the Herfindahl index of ethnolinguistic group shares, and signifies the probability that two randomly selected persons from a population will belong to different groups. The theoretical maximum is reached when each individual belongs to a different group (or the value of 1) (Alesina et. al 2002, p. 156). For the current study, the combined linguistic and racial/ethnic

variable from the Norris (2008) dataset is used.

The second dimension of population heterogeneity is economic disparity, herein defined as income inequality, as captured by the Gini coefficient. Cited as both a cause and consequence of corruption, “inequality in the distribution of wealth and income tends to reproduce power differentials in society that foment corruption” (Morris, 2004, p. 4. See also Goudie and Stasavage, 1998). Based upon the Lorenz curve, the Gini coefficient is defined as a ratio with values between 0 and 1, where 0 denotes perfect equality (everyone earns the same amount) and 1 denotes perfect inequality (one individual holds all of the income) (Sen, 1973). Gini coefficient values from the United Nations Human Development Report (2004) are used in this study. Principal components analysis (PCA) indicates that these measures load on a single factor (factor loading = 0.816; Eigenvalue = 1.33), explaining 66.6% of the variance. While the Cronbach’s alpha value of 0.32 is lower than desired, this is likely due to the limited number of components. Regression analysis was performed used an un-collapsed version of this measure with no substantive change in the results.

The literature has also linked *government size* to levels of corruption within nation-states (Husted, 1999, Morris, 2004; Treisman, 2000; Xin and Rudel, 2004). Larger bureaucracies tend to increase corruption opportunities by the sheer number of officials who hold a monopoly over resources needed by citizens (Husted, 1999). In particular, less-developed and developing countries tend to have over expanded, large state sectors when compared to nations in the industrialized world (Theobald, 1990).

According to LaPalombara, there exists “a rough correlation between how much of GDP

a government gets its hands on and how much corruption exists” (1994, p. 338). The size of government in the current study is measured as central government expenditures are a percentage of GDP. Five-year averages covering the years included in this study (2000-2005) are estimated.

To control for historical effects, a dummy variable is created to indicate if the nation was formerly a British colony (“0” = no; “1” = yes). Treisman (2000) discovered a strong, negative relationship between British heritage and current levels of perceived corruption—a reduction of nearly two points on a ten-point corruption index, while no significant relationship emerged between “never colonized” nor French or Spanish/Portuguese colonization and corruption (p. 418-419 See also Sandholtz and Koetzle, 2000). Treisman credits this negative British heritage-corruption relationship to a particular “legal culture” left behind by the colonizers, a culture that emphasizes judgment based upon precedence rather than legal codes as well as “procedural justice over substantive issues” (p. 422).

Finally, empirical analysis has found the Protestant religious ethos to reduce corruption due to its “emphasis on individual responsibility for moral conduct and its generally less tolerant attitude toward human failing” (Sandholtz and Koetzle, 2000, p. 40. See also Lipset and Lenz, 1999; Treisman, 2000). In the current study, predominantly Protestant is measured as a dichotomous variable (“0” = no; “1” = yes). Data for both the former British colony variable and predominantly Protestant are from the Norris dataset (2008).

Analytic strategy

After a brief examination of the descriptive (univariate) and bivariate statistics, multivariate analysis will be estimated using ordinary least-squares regression (OLS). Baseline levels of the strength and direction of corruption perceptions regressed on state dominance, net the effects of the control variables, will be estimated. The possible causal link of mediation will be tested by examining the direct effects of all variables in the model. Should the inclusion of the non-polity variables reduce the magnitude of the effects of state dominance, this shall indicate partial mediation; full mediation would occur if state dominance were to become non-significant or change its algebraic sign (Baron and Kenny, 1986). In order to assess the possible moderating effect of the non-polity variables, a series of models will be run with the inclusion of cross-product interaction terms (e.g. state*economy, state*family, etc.). Diagnostic tests will be performed to determine if any serious violations to the assumptions of OLS exist (Fox, 1991). Results will be discussed along with directions for future research and a discussion of the study's limitations.

Chapter Five

Results

The following analysis was conducted in order test the following four hypotheses (as described in Chapter 4):

H₁: The level of state dominance (defined herein as the absence of popular control over the state) is positively related to corruption cross-nationally.

H₂: The effects of non-polity institutions will moderate the criminogenic effects of state dominance.

H₃: The effects of non-polity institutions will mediate the criminogenic effects of state dominance.

H₄: Nations whose cultural value systems exhibit high levels of moral cynicism will have higher levels of corruption.

Descriptive statistics appear in Table 6 (below); the final column lists zero-order correlations (Pearson's product-moment correlation coefficient (r)) for the dependent and key independent variables. For the nations included in this study, the average level of corruption is four, based upon the one-to-ten Transparency International Corruption Perceptions Index (TI-CPI). Finland ranks lowest in corruption, while the TI-CPI ranks Bangladesh as the most corrupt.

Table 6: Descriptive statistics and selected zero-order correlations

<u>Variable</u>	<u>Mean</u>	<u>S.D.</u>	<u>Min.</u>	<u>Max.</u>	<u>r**</u>
<i>Dependent variable</i>					
Corruption	4.03	2.09	9.50	1.22	
<i>Independent variables</i>					
State dominance	2.67	1	1	4.62	.78 [†]
Industrialization	-.02	.99	-2.01	3	-.82 [†]
Family disruption	53	14.26	29.20	82.60	.13
Education	0	1	-.2.25	1.40	-.22
Moral cynicism	-.08	.93	-1.79	1.08	.11
Interpersonal distrust	3	1	0	5	.65 [†]
<i>Controls</i>					
Population het.	.05	1	-1.95	2	
Government size	16.05	6.21	5	29.9	
Prev. British colony	0*				
Protestant	0*				

* Dichotomous variable, statistic is mode

** Zero-order correlation between theoretical variables and corruption (TI-CPI).

[†] $p < 0.05$ ⁵

The average level of state dominance in the nations sampled is 2.67 (based upon the non-transformed, one-to-five state dominance scale). The highest levels of dominance appear to cluster in African (Sudan = 4.62, Zimbabwe = 4.51, Cameroon = 4.04, Guinea = 4.02, Togo = 4.01) and post-Soviet nations (Uzbekistan = 4.53, Belarus = 4.40, Tajikistan = 3.96). The lowest levels of state dominance are found in Nordic social democracies, with Denmark, Sweden, and Norway each scoring a one. Zero-order correlations between state dominance and corruption perceptions suggest a fairly robust relationship at the bivariate level ($r = 0.78$)

Of the other social institutions identified in Messner and Rosenfeld's theory, the strength of the economy (operationalized as the level of industrialization within a nation) is highest in the Organization for Economic Co-Operation and Development

⁵ All p values are based upon a one-tailed test.

(OECD) nations (e.g. Iceland, Norway, Canada, Sweden, and the United States) and lowest in sub-Saharan Africa (e.g. Ethiopia, Tanzania, Togo, Cameroon, and Sudan). Industrialization exhibits a strong, negative relationship with corruption perceptions ($r = -0.82$). In the nations sampled, a little over half of females age fifteen and up work outside the home (53%)—the current study's proxy of family disruption. Female economic activity is lowest in Syria (29.2%) and highest in Mozambique (82.6%). Educational strength, measured as a factor score comprised of literacy rates and gross enrollment, is highest in Spain and lowest in Ethiopia. At the bivariate level, neither the family disruption proxy, nor the education measure, is significantly related to corruption perceptions.

Of the two cultural measures included in the analysis, moral cynicism (operationalized as the aggregate number of voluntary organizations to which citizens belong and scores on a personal responsibility and agency scale) is lowest in the United States (-1.79), and highest in former-Warsaw Pact and -Soviet states (Ukraine = 1.10; Croatia = 0.95, Belarus = 0.87, Lithuania = 0.76, Latvia = 0.70, Hungary = 0.69). This measure does not exhibit a significant relationship with the corruption perceptions measure. The second cultural measure, interpersonal distrust, is lowest in the Nordic states (Finland, Denmark, Sweden and Norway = 0) and highest in two Latin American nations (Peru and Brazil = 5). Interpersonal distrust is positively associated with cross-national corruption perceptions, and this relationship is fairly strong ($r = 0.65$)

The control variables indicate that, in this sample, population heterogeneity is lowest in Japan, and highest in Syria, with the distribution following a normal curve. The

average level of central government expenditures as a percentage of GDP (government size proxy) is 16.05%. Only about one-fourth (24.7%) of the nations sampled are predominantly Protestant, and 33.2% were former colonies of Great Britain.

As two of the structural IAT indicators, as well as the cultural interpersonal distrust measure, are significantly related to corruption at the bivariate level, multivariate analysis is warranted in order to disentangle the unique effects of each when controlling for the other variables in the model. First, the effects of state dominance and the control measures on corruption perceptions will be estimated in order to provide a baseline analysis for comparison. Next, a model that includes the other, non-polity, institutions identified by IAT will be added to assess whether these variables mediate the relationship between state dominance and corruption. Then, a series of models will be run, each including one of the following cross-product terms—state dominance-industrialization, state dominance-education, and state dominance-family disruption. These interaction terms will be used to test for moderation effects between the component variables. Next, the full IAT model identified in the mediation model will be analyzed with the addition of the two cultural measures—moral cynicism and interpersonal distrust, to see if the introduction of these cultural factors produces an increase in the overall variance explained, as determined by a significant change in the coefficient of determination (R^2). Lastly, in order to assess the efficacy of the model, the results of regression diagnostic testing will be discussed. All models are estimated in SPSS using ordinary-least squares (OLS) regression.

Multivariate models

Table 7 presents the regression results for the direct effects of state dominance on corruption perceptions, controlling for population structure, government size, and known historical correlates of corruption. As a whole, this model is statistically significant,

Table 7: Corruption perceptions (TI-CPI) regressed on IAT indicators

Variable	Baseline model			Mediation model		
	b	β	t	b	β	t
State dominance (-1/x)	9.37	.87	14.33**	7.08	.65	9.76**
Industrialization				-0.76	-.31	-4.72**
Education				.12	.05	1.08
Family disruption				.01	.06	1.43
State X Industrialization						
State X Education						
State X Family disruption						
Population heterogeneity	-0.11	-0.05	-0.92	-0.01	.00	-0.06
Government size	-0.04	-0.10	-2.00 **	-0.02	-0.03	-0.76
Fmr. British colony	-0.38	-0.07	-1.64*	-0.45	-0.08	-2.07**
Protestant	-0.04	-0.01	-0.17	-0.21	-0.04	-0.80
F-statistic (df)	94.7 (5)**			82.1(8)**		
Adjusted R ²	.80			.86		
ΔR^2				.06**		
	N = 121			N = 109		

* p < 0.10; ** p < 0.05

(F = 94.7, p < 0.05), explaining 80% of the variation in corruption perceptions across the nations sampled. In order to introduce linearity to the state dominance-corruption relationship, the negative inverse (-1/x) of the state dominance scale was substituted for the five-point state dominance scale in this, and all subsequent, all estimations. Net the effects of the control variables, state dominance is significant and positively related to corruption perceptions, such that a one unit increase in state dominance yields a 9.37 increase in corruption perceptions. Moreover, this relationship is quite robust ($\beta =$

0.87).

Mediation

As discussed in Chapter Three, Messner and Rosenfeld argue that, for societies where the economy is dominant, a shift in the “institutional balance of power” may devalue, accommodate, and penetrate non-economic institutions (2007, p. 76-83). Maume and Lee extend this point such that, “the characteristics of the economy in a social system not only shape the character of social institutions, but also...*the economy will continue to have a direct impact* on how other institutions function and are able to effectively control criminal behavior” (2003, p. 1148, emphasis added). They introduced a second causal link where the strength of non-economic institutions, undermined by the dominance of the economy, directly affect, or partially mediate the effect of the economy on, crime rates (p. 1149). Extrapolating this finding to the current study, the researcher expects that the effects of the non-polity institutions will mediate the corruption-prone tendencies of dominant states.

In order to test for mediation effects, the non-polity variables (industrialization, education, and family disruption) were added to the baseline model. As shown in the second panel of Table 7 (above), the addition of these mediator variables significantly increase the explained variance by 6% (F change = 10.43, $p < 0.05$). Should the state dominance variable become non-significant or reverse its algebraic sign due to the inclusion of the non-polity variables, this would signify full mediation (Baron and Kenney, 1986). As indicated by the significant t-value and positive unstandardized beta for state dominance, this is obviously not the case in the present data, however; the

unstandardized beta is reduced 24.47% when the additional institutional variables are added to the model ($b = 7.08$); this suggests partial mediation. Furthermore, this attenuation is significant ($p < .01$, two-tailed test) based upon the statistical test for the equality of regression coefficients developed by Paternoster et. al (1998).

$$z = \frac{b_1 - b_2}{\sqrt{SE b_1^2 + SE b_2^2}}$$

$$z = \frac{2.29}{\sqrt{(.428)^2 + (.527)^2}}$$

$$z = 2.34$$

Only one of the non-polity institutions is exerting this mediating effect. Industrialization (proxy variable for economic strength within a nation-state) was negatively related to corruption perceptions, such that a one-unit increase in industrialization results in a 0.76 reduction on the TI-CPI. This is consistent with Messner and Rosenfeld's (1997) argument that the economy acts as an institution of normative control, as first suggested by liberal political and economic theories of the enlightenment, later echoed in Hirschman's *doux-commerce* thesis (1992. See Chapter Three, this thesis).

Consistent with prior bivariate findings (See Table 6), neither education nor the family disruption measures produces significant direct effects on corruption.

Moderation

Chamlin and Cochran (1995) first identified an "interplay" and interdependency between IAT's social institutions using non-additive modeling. In the current study, three product terms (state-industrialization, state-education, and state-family) were added to the full socio-structural model to test for moderating effects. In creating these interactions, the variables were mean-centered prior to transformation in order to

eliminate multicollinearity between the component variables and their product terms
(McClendon, 1994). Regression results appear in Table 8 (below).

Table 8: Corruption perceptions (TI-CPI) regressed on IAT indicators, moderation models

Variable	Full IAT structural model			Moderation model 1			Moderation model 2			Moderation model 3		
	b	β	t	b	β	t	b	β	t	b	β	t
State dominance (-1/x)	7.08	.65	9.76**	6.36	.59	8.67**	6.67	.62	7.77**	7.08	.65	9.27**
Industrialization	-.76	-.31	-4.72**	.10	.04	.31	-.81	-.33	-4.68**	-.76	-.31	-4.51**
Education	.12	.05	1.08	-.02	-.01	-.19	.39	.14	1.17	.12	.05	1.06
Family disruption	.01	.06	1.43	.01	.07	1.90*	.01	.05	1.23	.01	.06	.60
State X Indust.				1.70	.41	3.15**						
State X Education							.67	.11	.86			
State X Family										0	.00	.10
Population heterogeneity	-.01	.00	-.06	-.01	-.01	-.10	.00	.00	.04	-.01	-.00	-.06
Government size	-.02	-.03	-.76	-.02	-.03	-.74	-.01	-.03	-.61	-.02	-.03	-.75
Fmr. British colony	-.45	-.08	-2.07**	-.55	-.10	-2.6**	-.45	-.08	-2.04**	-.45	-.08	-2.04*
Protestant	-.21	-.04	-.80	.08	.02	.32	-.14	-.02	-.52	-.21	-.04	-.76
F-statistic (df)		82.1(8)**			80.6(9)**			72.9(9)**			72.2 (9)**	
Adjusted R ²		.86			.87			.86			.86	
ΔR^2					.01**			0			0	

N = 109

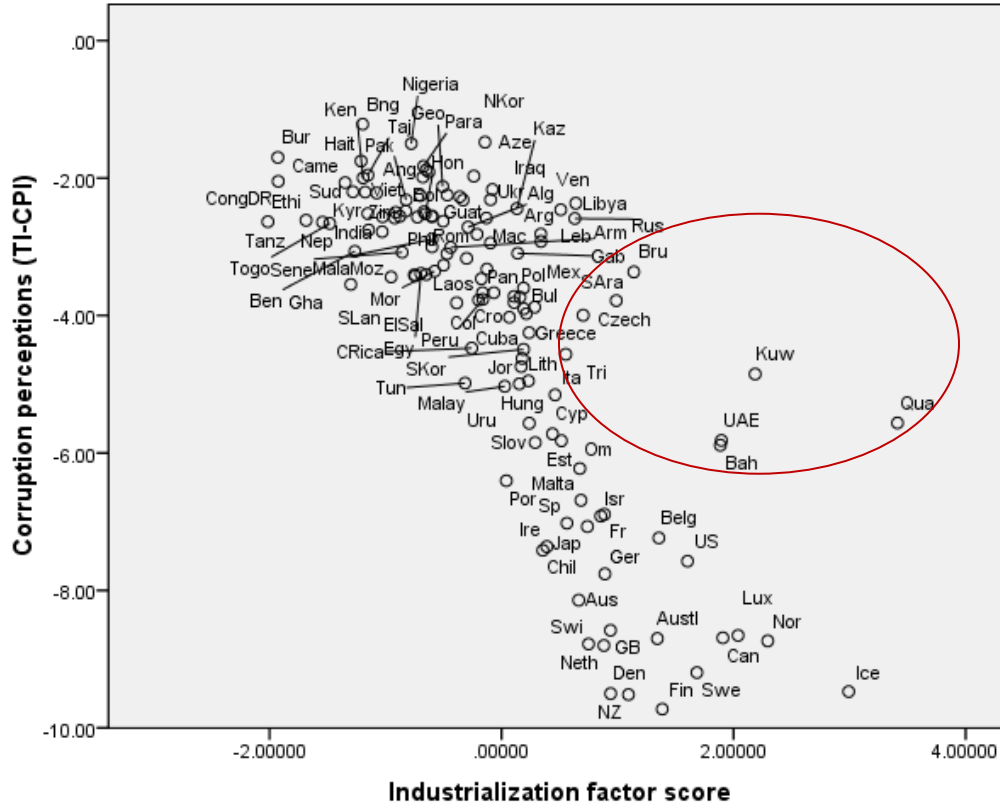
* p < 0.10; ** p < 0.05

Panel 1 shows the regression estimates for the full structural IAT model in order to provide a baseline for model comparison. Moderation model 1 introduces the state-industrialization interaction term. At the model level, the inclusion of this product term significantly increases the explained variance by one percentage point (F change = 9.90, $p < 0.05$) confirming the necessity of the non-additive model. The significant t-value for the state-industrialization product term suggests that the effects of these institutions do interact ($b = 1.70$). In other words, the effect on state dominance on corruption perceptions is dependent upon a nation's level of industrialization. The positive sign attached to the coefficient indicates that, contrary to the *doux-commerce* thesis, higher levels of industrialization increase corruption perceptions when the level of dominance by the state is high.

This finding may be indicative of the fact that, for autocracies and dictatorships, economic statism is present, such that the "naturally" autonomous realm of the economy has been nationalized by the state (Garland, 1997). Examining a scatterplot of TI-CPI scores against industrialization (see Figure 5, below) confirms that corruption perceptions are relatively high, even in the presence of high levels of industrialization in the oil-producing rentier states of Saudi Arabia, Kuwait, United Arab Emirates, Bahrain, and Qatar. Indeed, political scientists have advanced rentier state theory to explain authoritarianism and resistance to democratization in the petroleum-rich states of the Middle East (Smith, 2004), nations where oil revenues enable the state to "buy off political consensus" (Beblawi and Luciani, 1987, p. 7). Natural resource abundance has been positively linked to rent-seeking activities and corruption in the literature (e.g.

Ades and DiTella, 1999; Fish, 2005; Lambsdorff, 1999; Leite and Weidmann, 2002; Robbins, 2000, Treisman, 2000).

Figure 5: Corruption perceptions and industrialization scores



As shown in moderation models two and three (Table 8, above), the inclusion of the state-education and state-family interaction terms do not increase the overall predictive power of the model, with both explaining approximately 86% of the variation in corruption measures, the same as the direct effects baseline model. Furthermore the F-change statistic fails to reach significance in either model two (F change = .73, $p > 0.05$) or model three (F change = .00, $p > 0.05$).

Cultural indicators

Although generally omitted in empirical tests of IAT due to lack of data, Messner and Rosenfeld's theory of crime includes a cultural, as well as structural, component. In the alternate configuration of IAT tested in the present paper, the dominant cultural ethos is not that of the anomic state, but rather one of moral cynicism, defined herein as a lack of personal agency and responsibility on the part of the citizenry and interpersonal distrust. As these measures, gleaned from aggregate responses to the World Values Survey, are not available for a number of the nations included in the prior analyses, a separate analysis was performed ($N = 50$).

Panel one of Table 9 provides the benchmark regression of the TI-CPI regressed on IAT structural indicators and appropriate controls. Panel 2 includes the two cultural indicators as discussed in Chapter 4—moral cynicism and interpersonal distrust.

Table 9: Corruption perceptions (TI-CPI regressed on IAT structural and cultural indicators)

Variable	Baseline model			Culture		
	b	β	t	b	β	t
State dominance (-1/x)	7.08	.65	9.76**	5.80	.54	5.05**
Industrialization	-.76	-.31	-4.72**	-.86	-.28	-3.50**
Education	.12	.05	1.08	.05	.02	.25
Family disruption	.01	.06	1.43	.02	.01	1.50
Moral cynicism				.18	.05	.75
Interpersonal distrust				3.85	.20	2.83**
Population heterogeneity	-.01	.00	-.06	.01	.01	.06
Government size	-.02	-.03	-.76	.00	.00	-.03
Fmr. British colony	-.45	-.08	-2.07**	-.34	-.05	-.79
Protestant	-.21	-.04	-.80	-.45	-.07	-.84
<i>F</i> -statistic (df)		82.1(8)**			34.4(10)**	
Adjusted R ²		.86			.87	
ΔR^2					.01**	
		N = 121			N = 50	

** p < 0.05

At the model level, the inclusion of the two cultural indicators increases the model fit by one percentage point over the structural model; this increase is significant (F change = 4.856, p < 0.05). As in the bivariate analysis, moral cynicism is not significantly related to corruption perceptions in these data. Interpersonal distrust does exhibit a moderate ($\beta = 0.2$) relationship with corruption perceptions, holding all other variables in the analysis constant. For every one-point increase in the interpersonal distrust scale, there is a corresponding 3.85 increase in the TI-CPI. This is consistent with the alternate reading of IAT, as well as with corruption research that has linked this dimension of social capital with corruption at the cross-national level (Uslaner, 2004). Although Uslaner (2004) claims that the direction of causation is from social trust to corruption, there is a likelihood of a non-recursive relationship, or feedback loops, such that a lack

of social trust increases corruption, which than increases interpersonal distrust. Unfortunately, the cross-sectional nature of the current study precludes testing this hypothesis. Finally, there is also a possibility of mediation and/or moderation of the institutional variables by the inclusion of the social trust measures. At this time, however; these possibilities have not been fully theorized.

Regression diagnostics and sensitively analysis

The use of ordinary least-squares regression analysis requires that certain assumptions about the data be met. According to Berry and Feldman (1985), “in the real world of research...one or more of these assumptions are likely to be violated... [This] may produce misleading or problematic coefficient estimates” (p. 7). In the current study, several transformations of the data were performed in order to introduce linearity (transformation of the state dominance variable) and deal with a non-additive model specification (introduction of appropriate interaction terms).

In macro-level research studies, multicollinearity often poses problems amongst highly correlated theoretical constructs. When multicollinearity is present, parameter estimates may be biased and unreliable, standard errors become inflated and Type-II errors become likely (Fox, 1991). In the present study, several component variables were combined using principal-components analysis (PCA) in order to reduce the highly correlated dimensions into a single factor score. Furthermore, in the creation of the interaction terms for the moderation models, variables were mean-centered prior to estimation as per convention (Jaccard, Turrisi, and Wan, 1990). Although at the bivariate level, state dominance and industrialization were highly correlated ($r = -0.72$),

an examination of the variance inflation factors (VIF) indicated that none reached the “rule of thumb” threshold of $VIF > 4$, with the highest VIF equaling 3.7 for the state-dominance measure in the mediation (full-structural) model (Fox, 1991)⁶. Finally, both the state dominance and industrialization measure reaches statistical significance in each of the models tested, thus, it appears that the data are free from serious collinearity.

Examination of the dependent and independent variable residuals did not indicate heterogeneity in the error variance, another issue often prevalent in macro-level research. Although one of the variables, moral cynicism, did appear to exhibit a heteroskedastic “fan shape,” White’s test (1980) failed to confirm non-constant error variance in this measure. Spatial autocorrelation was also not problematic in the present data, as the Durbin-Watson statistic for each of the models estimated approximately two.

A final test of the regression assumptions indicated the presence of two influential outliers in the data. Both the Czech Republic and Nigeria produced Cook’s distance values greater than one. An examination of the DFbeta scores for the individual independent variable showed that these two nations were outliers on the state dominance, education, family disruption, moral cynicism, and interpersonal

⁶ The state-dominance variance-inflation factor did reach 4.76 in moderation model 1, which includes the state dominance-industrialization interaction. Furthermore, that interaction product term had a VIF of 12.50. This is unavoidable to the inherent perfect correlation of the state-dominance component variable and the high correlation between state dominance and industrialization in the bivariate findings. Both reach statistical significant in the model, indicating that high collinearity is not problematic, although the exact coefficients should be interpreted with caution.

distrust measures. Additionally Nigeria was an outlier on industrialization, population heterogeneity, and government size indicators. To test the sensitivity of the models indicated in the present study, each was rerun with Nigeria and the Czech Republic variable removed.

Regression analysis with these outlier nations removed showed no substantive difference in either the cultural or two of the moderation models. However, in the mediation (full socio-structural IAT model), the omission of the Czech Republic and Nigeria increases the model fit, such that the model explains 90% of the variation in corruption perceptions cross-nationally. Additionally, in the revised mediation model the education measure reaches statistical significance ($b = .54$), $p < 0.05$), although this effect is weak ($\beta = .15$) and not in the expected direction. Moderation model one (state-industrialization interaction) and moderation model three (state-family disruption interaction) are substantively unchanged, however; in moderation model two (state-education interaction) the algebraic direction of the state-education interaction reverses direction ($b = -0.57$), but the effect size is weak and fails to reach statistical significance ($\beta = -.09$, $p > 0.05$). This finding indicates that IAT is not only sensitive to the measures included in analysis (Piquero and Piquero, 1998), but also the nations included in analysis as first suggested by Trent (2007). As this is the first study of this alternate configuration of the institutional balance of power, as well as the first study to include over 100 nations at varying stages of development, further research is warranted.

Chapter Six

Discussion

The purpose of this study was to test the efficacy of an alternate configuration of Messner and Rosenfeld's institutional-anomie theory. Prior research has supported of IAT at the cross-national level (Messner and Rosenfeld, 1997; Savolainen, 2000), when the "institutional balance of power" is tipped so that the economy dominates over non-economic institutions, which, in turn, lose their ability to exert normative controls over a populace (Messner and Rosenfeld, 2006, p. 130-131). Support for IAT has also been found sub-nationally at various levels of aggregation (Chamlin and Cochran, 1995; Maume and Lee, 2003; Piquero and Piquero, 1998). All but one empirical test of IAT has focused on street crime (see Schoepfer and Piquero, 2006, for an analysis of white-collar crimes across a United States sub-national sample); the current study expands upon this small body of literature to include other institutional configurations, while focusing on less-studied crimes of power.

According to Messner and Rosenfeld, it is not merely economic dominance that may be responsible for high crime rate, but rather, "institutional imbalance *per se*" (2001, p. 155, emphasis in original). The authors describe other, analytically distinct configurations of institutional imbalance that predict different types of crime. One of these, a dominant state, is hypothesized to be related to high levels of corruption within a social collective (Messner and Rosenfeld, 2001; 2004; Rosenfeld, 2004). This study is

the first to test this alternate configuration across a relatively large sample of nations at varying levels of development. Additionally, this study provides a complete test of this alternate configuration of IAT by developing an operationalization and measure for “moral cynicism”, the cultural condition that Messner and Rosenfeld posit as the cultural condition caused when “the state assumes and ever expanding role in regulating everyday life” (2001, p. 155). To date, few empirical tests of IAT have included measures of culture dynamics, an integral facet of IAT, and with limited support (Cao, 2004; Chamlin and Cochran, 1997; 2007; Cullen, Parboteeah, and Hoegl, 2004; Jensen, 2002; Muftic, 2006).

The current study confirms Messner and Rosenfeld’s alternate configuration of the institutional balance of power. As hypothesized, the level of state dominance (defined and measured as the absence of popular control over the state), is positively related to corruption cross-nationally, with the highest levels of state dominance clustered in several African and post-Soviet nations, countries which also rank high on Transparency International’s Corruption Perceptions Index (TI-CPI). As suggested by the literature (Montinola and Jackman, 2002; Sung, 2004), a curvilinear relationship was found between state dominance and corruption, one that takes a cubic functional form. In order to introduce linearity to the state dominance-corruption relationship, the negative inverse ($-1/x$) of state dominance was used in the multivariate regression models. The direct effects of state dominance on corruption, controlling for known correlates of corruption was very strong, explaining 80% of the variation in corruption across the nations included in the sample.

According to Messner and Rosenfeld, social institutions are to some degree interdependent and coordinated. It is hypothesized that the non-polity institutions will mediate and/or moderate the corruption-prone tendencies of the dominant state. In order to test for mediation, the non-polity variables (economy (industrialization), education, and family disruption) were added to the baseline model. The addition of these variables increased the coefficient of determination for the model to 86%. One of the non-polity variables, industrialization (proxy for economic strength), was negatively related to corruption cross-nationally, and, additionally, attenuated the corruption-producing effects of the dominant state. This finding is consistent with Maume and Lee's mediation hypothesis (2003), as well as Messner and Rosenfeld's (1997) argument that the economy acts as an institution of normative control. The other institutions described in IAT (education and family disruption) failed to relate significantly to corruption at the cross-national level, consistent with bivariate findings in the present study.

A second possible causal link—moderation, was tested through the introduction of interaction terms. The state dominance-industrialization interaction was significantly related to corruption cross-nationally indicating that a non-additive model was appropriate. In other words, the effect of state domination on corruption is dependent upon levels of industrialization. Higher levels of industrialization actually increases corruption when the level of state dominance is high. While this may appear to contradict the earlier mediation finding, this is consistent with prior research on corruption in dictatorships and rentier state theory, and it indicates that the mediation

and moderation arguments are not mutually exclusive.

Finally, unlike many prior tests of IAT, the present study included two measures of cultural conditions gleaned from the World Values Survey—moral cynicism and interpersonal distrust. While the former (measured as a factor score of volunteerism and personal responsibility and agency) was unrelated to corruption at the cross-national level, interpersonal distrust was positively related to corruption. Although the magnitude of this relationship appears weak ($\beta = 0.2$), this measure did reach significance in a smaller sub-sample of nations ($N = 50$), or under less than ideal circumstances. This finding is consistent with the small body of literature linking social trust (or *social capital* (see Putnam, 2000)) with lowers instances of corrupt activities (Bjornskov, 2004; Uslaner, 2004; Zak and Knack, 2001). This may be an indirect link, as it is hypothesized that “trusting societies” are more likely to have more efficient bureaucracies and higher levels of development, both correlates of reduced corruption (Harris, 2007, p. 2). The inverse has also been supported, suggesting that societies with high levels of social capital may also be characterized by clientelism or familism, which reduces the ability for in-group members to cooperate with outsiders (Harris, 2007; Lipset and Lenz, 1999). The positive association between distrust and corruption in the current study warrants further investigation.

Regression diagnostics identified two nations who proved to be outliers on nearly every independent variable—Nigeria and the Czech Republic. The removal of these two nations increased the fit of the mediation model, such that the coefficient of determination reached 90%. Furthermore, this change caused the direct effects of

education to become significantly, *positively* related to corruption, an unexpected finding. Limited research suggests that corruption nations will have lower levels of education, as resources are diverted and distorted, benefitting political organizations rather than the populace (Mauro, 1997). Although higher levels of education have been found to increase white-collar criminal behaviors, the inverse has been found when dealing with street crimes (Schoepfer and Piquero, 2006). This seemingly incongruent findings warrants further investigation as the effects of education on corruption levels cross-nationally has largely been ignored.

Additionally, as the presence of only two outliers significantly impacts the results, future research should continue to examine the applicability of IAT to a such large array of nations. As found by Chamlin and Cochran (2007) and echoed in Trent (2007), the efficacy of IAT seems to be dependent upon the levels of development of the nations included in the analysis. When state dominance is plotted against corruption (see Chapter 4), it appears that only a few highly industrialized, generally core OECD nations appear in the low-corruption, low-state dominance range. Similarly, only a handful of nations are high-corruption, high state dominance, and most are politically unstable, low development, peripheral nations. Replication of the current study, sampling from these “extremes” may provide more interesting results as to the role that that various characteristics of the state may play in these cases. IAT alone may not be able to explain these findings, suggesting integration with other theories, such as dependency and world systems, quantifiable through political economy measures

(Wallerstein, 1974)⁷

Limitations

Several limitations exist in the current study, each providing avenues for future research. At the macro-level, direct measures of theoretical constructs are unavailable. Proxy variables must be used. The current study used a factor score that measured a nation's level of industrialization as a proxy for the strength of the economy within a collective. This measure strayed from the standard measures of economy found in macro-level analysis—relative or absolute deprivation, as the common variables representing these constructs (GINI coefficient and poverty levels, respectively) present problems with endogeneity and causal order. Prior research suggests that these measures are both a cause and consequence of corruption (see Lambsdorff, 1999).

Following Cullen et. al. (2004) who draw on Bonger (1969), the current study operationalized the strength of the economy as levels of industrialization, yet, in the globalized world, the relevance of this measure may be called into question. Many industrialized nations, including the United States, have moved from production to service economies as globalization shrinks our world. Research suggests that the advent of large multi-national conglomerates actually leads to competition that promotes corruption in developing nations (Goudie and Stasavage 1998, p. 119), while Sajó (2003) puts forth globalization as an explanation of recent increases in corruption cross-nationally, especially instances of grand corruption. Future research should address measures that tap into the globalized economy. These may include measures of

⁷ The author would like to thank Michael Lynch for pointing out this interesting link.

transnational trade, labor migration, capital investment, and technology, using indices such as the KOF Index of Globalization (Dreher, 2006). Still, the interesting results of the current study, such that industrialization acts as both a mediator and a moderator to the corruption-prone effects of state dominance, should not be discarded. Rather, further research should build upon this foundation when determining how to best measure the economy both within and outside the IAT framework.

Future studies of IAT must continue to find applicable measures for the other social institutions described in Messner and Rosenfeld's theory. In particular, the family disruption measure, usually captured as the ratio of marriages to divorces, is unavailable for a large number of nations, thus the effects of divorce on corruption remains unknown. The current study used a measure of female economic activity to capture family disruption, but this measure was not related to corruption rates. In the absence of other measures, we cannot determine what role, if any, the family institutions plays in the study of corruption. Unfortunately, due to barriers such as cost, feasibility, and efficiency, researches are often limited to the use of secondary data not systematically collected to specifically test theory. Lacking direct and sound cross-national measures, the effects of this and other institutions such as religion will remain largely hypothetical. Furthermore, the unavailability of sound measures precluded testing this configuration of IAT against any rival theories at this time. Only as macro-level measures become more developed and refined, will critical theory testing become possible at the cross-national level.

Finally, the use of a cross-sectional dataset limits the current findings to

correlates, rather than causes of corruption. It is common practice to use multi-year averages to control for economic and political fluctuations, however; in order to disentangle causal order, it is imperative to test theories cross-nationally using longitudinal, time-series data. Examination of nations over time would also better assist in determining if the non-political institutions mediate or moderate the corruption-prone effects of state dominance by examining the effects of these institutions consecutively at equal intervals and identifying turning points. Future research should begin to use longitudinal data as this becomes available.

Finally, it is troublesome that the moralistic approach to the study of corruption that emerged in the 1990's has been used to promote anti-corruption legislation and agenda, rather than comprehension of the phenomenon (Kotkin and Sajó, 2002). It is imperative that we first begin to understand corruption, a behavior that lacks even a definitional consensus, before we use empirical findings to inform public policy. Simply put, at this time, not enough is known.

Conclusion

In sum, in the twelve years since the publication of *Crime and the American Dream*, researchers have found institutional-anomie theory to provide a sophisticated expansion of the Mertonian tradition of anomie theory as a possible explanation of the variance in crime rates across various macro-social units of analysis, but the authors do not limit their theory to instrumental crime, nor to cultural conditions of anomie. As shown in the current study, alternate specifications of the theory show empirical promise in predicting other forms of crime, or crime- equivalents, under other cultural

conditions. At present, too little has been done in both furthering theories of the anomie paradigm, and in studying other forms of crime and deviance beyond conventional street crime. Further research will assist in better specifying IAT's theoretical and causal assumptions, and, if sustained, institutional-anomie theory may provide guidance to instruct public policies and the allocation of national assets in combating not only crime, conventionally defined, but also a wide range of serious offenses.

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Appendix

APPENDIX A: DATA SOURCES

<i>Variable</i>	<i>Description</i>	<i>Source</i>
Corruption perceptions	1 to 10 scale (Higher scores indicate higher levels of perceived corruption); 2001-2005 avg. (annual)	Transparency International <i>Corruption Perceptions Index</i> www.ti.org
Moral cynicism Cynical orientation	Voluntary organization mean and government responsibility factor score; 2000	World Values Survey-International Network of Social Scientists <i>World Values Survey (2000)</i> www.worldvaluessurvey.org
Interpersonal distrust	Social trust measure; 2000	World Values Survey-International Network of Social Scientists <i>World Values Survey (2000)</i> www.worldvaluessurvey.org
State dominance Voice and accountability	Extent to which citizens may participate in government, freedom of speech/association; 2000-2005 avg. (annual)	World Bank Group <i>Governance Indicators</i> www.worldbank.org/wbi/governance/
Regulatory quality	Regulations that promote and permit private sector development; 2000-2005 avg. (annual)	World Bank Group <i>Governance Indicators</i> www.worldbank.org/wbi/governance/
Rule of law	Quality and predictability of law enforcement and judiciary, extent to which agents have confidence in rules of society ; 2000-2005 avg. (annual)	World Bank Group <i>Governance Indicators</i> www.worldbank.org/wbi/governance/
Civil liberties and political rights	Freedom of expression, associational and organizational rights, personal autonomy; electoral process, political pluralism, 2000	Freedom House <i>Freedom Around the World, 2005</i> www.freedomhouse.org
Freedom of the press	Legal environment, political pressures, economic factors, access to information; 2004	Freedom House <i>Freedom Around the World, 2005</i> www.freedomhouse.org
Dimensions of democracy (Vanhanen)	Competition (% of seats held by dominant party) and electoral turnout; 1810-1998	T. Vanhanen (2000) "A new dataset for measuring democracy, 1810-1998" <i>Journal of Peace Research, 37(2), 251-265</i>

APPENDIX A: DATA SOURCES (cont.)

State dominance (cont.) Regime type	Monarchic dictatorship, military dictatorship, civilian dictatorship, presidential democracy, mixed democracy, parliamentary democracy; 2000	J.A. Cheibub. & J. Gandhi, J. (2004). "A six-fold classification of democracies and dictatorships" Paper presented the 2004 meeting of American Political Science Association.
Industrialization factor score GDP per capita (PPP)	Final value of goods and services within a nation adjusted for cost of living and inflation; 2000-2005 avg. (semi-annual)	World Bank Group <i>World Development Indicators</i> , 2007 www.worldbank.org
Commercial energy use	Oil equivalent per capita; 2002-2005 avg. (semi-annual)	World Bank Group <i>World Development Indicators</i> , 2007 www.worldbank.org
Electrical consumption	Per capita in kilowatt-hours; 2001	United Nations <i>Human Development Report</i> , 2003 www.undp.org
Urban population	Population living in urban areas (defined by within-nation census data) as % of total pop.; 2002-2005 avg. (annual)	World Bank Group <i>World Development Indicators</i> 2007 www.worldbank.org
Distribution by sector	Economic distribution by sector; percent non-agrarian (combined industry and service); various years	United States Central Intelligence Agency <i>CIA World Factbook</i> , 2007 https://www.cia.gov/library
Family disruption	Female economic activity (non-domestic labor) rate (% ages 15 and above); 2002	United Nations <i>Human Development Report</i> , 2003 www.undp.org
Education factor Enrollment	Combined gross enrollment (primary, secondary, and tertiary schools); 2001-2004 avg. (annual)	United Nations <i>Human Development Report</i> , 2003;2007 www.undp.org
Literacy rate	Adult literacy rate (ages 15 and above); 2000-2002 (annual)	United Nations <i>Human Development Report</i> , 2003 www.undp.org

APPENDIX A: DATA SOURCES (cont.)

Control variables <i>Population heterogeneity</i> Economic disparity	Gini index of income equality; 2004	United Nations Human Development Report, 2004 www.undp.org
Ethno-linguistic fractionalization	Ethnic fractionalization (combined linguistic and racial); 2002	A. Alesina et. al (2002) "Fractionalization" <i>Journal of Economic Growth</i> , 8, 155-194
Former British colony	Dichotomous variable (0= no; 1 = yes)	United States Central Intelligence Agency <i>CIA World Factbook</i> , 2007 https://www.cia.gov/library
Protestant	Dichotomous variable (0=no; 1= yes)	United States Central Intelligence Agency <i>CIA World Factbook</i> , 2007 https://www.cia.gov/library
Size of government	Central government expenditures (as % of GDP); 2000-2005 mean value (annual)	World Bank Group <i>World Development Indicators</i> , 2007 www.worldbank.org